

**Initial Study and Mitigated Negative Declaration
KBRT - Oak Flat Towers
Planning Application No. PA100028
Orange County, California**

Prepared for:



County of Orange
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714.667.8845

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OC Communities Planning

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August 5, 2011



NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION

In compliance with section 15072 of the California Environmental Quality Act (CEQA) Guidelines and the County of Orange Procedures, notification is hereby given to responsible agencies, trustee agencies, interest groups and the general public, that the County of Orange shall adopt the attached Mitigated Negative Declaration File Number PA 100028.

PUBLIC REVIEW

The proposed Mitigated Negative Declaration (MND) is being circulated for public review. The dates of this review are noted in the MND. The attached Mitigated Negative Declaration may be adopted by the County of Orange and become final unless written comments or and Appeal on its appropriateness or adequacy are received by the office listed below by 4:30 p.m. on the ending date of the public review period.

CONTACT PERSON: Chris Uzo-Diribe **PHONE:** (714) 667-8845

PUBLIC MEETING(S)/HEARINGS ON PROJECT

The proposed project will be reviewed for approval by a decision-maker on the dates listed below.

DECISION MAKING BODY: OC Planning Commission

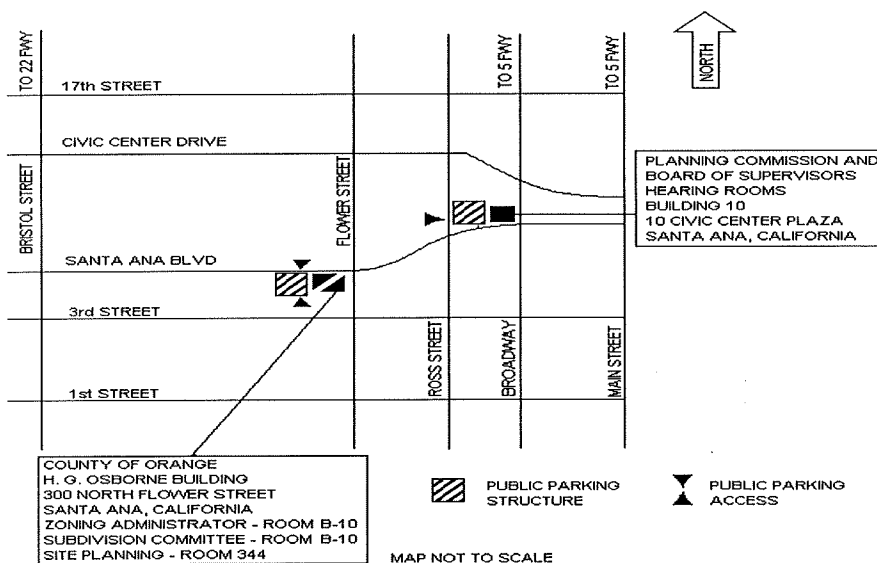
DATE: To be Determined

TIME:

LOCATION OF PUBLIC MEETING/HEARING: see location map below

In the event that there is no MND attached to this notice, the Mitigated Negative Declaration and supporting attachments are available for review at the offices of the at General Land Use Planning Division, Room 130, 300 North Flower Street, Santa Ana, CA 92702-4048.

LOCATION MAP OF MEETING/HEARING:





Project Charge No. PA100028
DATE POSTED: August 5, 2011
DATE FINAL _____

NEGATIVE DECLARATION

PLANNING & DEVELOPMENT SERVICES DEPARTMENT

300 N. FLOWER STREET

P. O. BOX 4048

SANTA ANA, CALIFORNIA 92702-4048

In accordance with Orange County Board of Supervisor's policies regarding implementation of the California Environmental Quality Act, the County of Orange has conducted an Initial Study to determine whether the following project may have a significant adverse effect on the environment. On the basis of that study, the County of Orange hereby finds that the proposed project will not have a significant adverse effect on the environment and does not require the preparation of an Environmental Impact Report because either the proposed project:

- a. has or creates no significant environmental impacts requiring mitigation; or
- b. **will not create a significant adverse effect, because the Mitigation Measures described in the initial study have been added to the project.**

The environmental documents, which constitute the Initial Study and provide the basis and reasons for this determination are attached and hereby made a part of this document.

PROJECT:

Title: The Oak Flat Towers File No: PA 100028

Description The project proposes construction of four radio transmitting towers and an equipment building, removing existing site structures and site preparation. The four towers are to be located in the approximate center of the project site equally spaced from each other. The proposed equipment building will be located between towers 3 and 4. Each of four proposed towers will be located within the perimeter security fencing, consists of 10-foot-high Concrete Masonry Unit walls.

Location: The project site is located at 9193 Black Star Canyon Road of unincorporated Orange County

Project Proponent or Applicant: Kierktron Inc.

Division/Department

Responsible for Proposed Project: OC Communities Planning Room No. 130

Address: 300 N. Flower St., Santa Ana, CA 92702-4048

Project Contact Person: Bea Bea Jimenez Telephone: (714) 667-8852

CEQA Contact Person: Chris Uzo-Diribe Telephone: (714) 667-8845

NOTICE:

The Negative Declaration may become final unless written comments or an appeal is received by the office listed above by 4:30 p.m. on September 6, 2011. If you wish to appeal the appropriateness or adequacy of this document, address your written comments to our finding that the project will not have a significant adverse effect on the environment: (1) Identify the environmental effect(s), why they would occur, and why they would be significant, and (2) suggest any mitigation measures which you believe would eliminate or reduce the effect to an acceptable level. Regarding item (1) above, explain the basis for your comments and submit any supporting data or references.

Dated: 8/5/11 [Signature]

NOTE: This document and supporting attachments are provided for review by the general public. This is an information document about environmental effects only. Supplemental information is on file and may be reviewed in the office listed above. The decision-making body will review this document and potentially many other sources of information before considering the proposed project.

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SECTION 1: INTRODUCTION

1.1 - Project Purpose and Background

The purpose of the proposed KBRT Radio Towers project (Project) is to construct a new radio transmitting tower facility in the Santa Ana Mountains for radio station KBRT AM 740. The new tower facility would replace the existing transmitting facility.

The radio station presently transmits from a facility located on Santa Catalina Island in Los Angeles County with studio and administration offices located in the City of Costa Mesa. This location has been operating continuously since 1952, but as of the end of 2013, the lease for this current site will expire and is not able to be renewed. The Project site was chosen at the end of a thorough two-year search, which included consideration of collocation options at established radio transmitting sites.

Throughout the 1990s, the Project site was used as a commercial radio transmission facility for Orange County Broadcasting (Radio Station AAHS KPLS 830 AM) that included three 300-foot radio transmission towers. This facility has been dismantled. The site was also historically used as an amateur radio station transmitting facility containing 20 radio transmission towers and a related radio building.

1.2 - Project Location

The Project site is located at 9193 Black Star Canyon Road, within an unincorporated area of the County of Orange (County) adjacent to the Riverside County boundary. The site is a private in-holding within the Cleveland National Forest. The 27.60-acre site is known as the “Oak Flat” portion of Black Star Canyon and is located approximately six miles from the unincorporated community of Silverado and three miles from the City of Corona. The Project site is more precisely described as Orange County Assessor Parcel numbers 085-061-02, 085-061-06, and 085-061-09 that have now been combined into a single parcel. Refer to Exhibits 1 through 3 that graphically depict the Project site location.

1.3 - Project Description

The proposed Project includes constructing four radio transmitting towers and an equipment building, removing existing site structures, and site preparation. Table 1 below provides a statistical summary of the proposed Project. A narrative description of the Project components follows the table.

Table 1: Statistical Summary

Category	Existing	Proposed
Project Site Acres	27.60	27.60
Legal Parcels ¹	1	1
General Plan Designation	Open Space	Open Space
Zoning Classification	A-1 (General Agriculture)	A-1 (General Agriculture)
Radio Towers - Number	20	4
Radio Towers - Height	20 to 60 ft	281 ft
Number of Buildings/Construction Type	1/Concrete block	1/Prefab Concrete
Building Size/Stories	1,200 sq ft/1 story	1,600 sq ft/1 Story
Maximum Power Limit	NA	50kW ERP ²
Vehicular Access	Skyline Drive ³	Skyline Drive
Secondary Emergency Vehicular Access	Black Star Canyon Road ⁴	Black Star Canyon Road
Emergency Back-Up Generator ⁵	NA	One diesel-powered
<p>Notes:</p> <p>1 A previous lot-line merger combined the previous three parcels into a single parcel.</p> <p>2 The Effective Radiated Power (ERP) limit provided here is an equivalency estimate. ERP power limits are calculated only for FM and TV broadcast and are not used to express AM broadcast power limits.</p> <p>3 Skyline Drive is located in the City of Corona, east of the project site.</p> <p>4 Black Star Canyon Road is located in Orange County, south and southwest of the project site and would be used only for secondary emergency access, if needed.</p> <p>5 The CMU generator enclosure in the equipment building is provided for a self-contained, trailer-mounted portable generator in the event a long-term power outage should occur lasting several days or longer.</p> <p>Source: Crawford Broadcasting Company, April 2011.</p>		

1.3.1 - Radio Towers

Tower Location

The four towers are located in the approximate center of the Project site equally spaced from each other. The proposed equipment building is located between towers 3 and 4. Refer to Exhibit 6 that provides the tower locations in aerial view and Exhibit 7 that provides the site plan.

Tower Fencing and Signage

Each of the four proposed towers will be located within the perimeter security fencing, consists of 10-foot-high CMU walls. The radio tower perimeter security fencing consists of 8-foot-high chain link fencing. A Federal Communications Commission Antenna Structure Registration Number will be placed at the base of each tower. In addition, signage will be placed in accordance with federal law on the perimeter fencing of each tower indicating that elevated levels of RF radiation may exist within the fenced area.

Tower Design

The proposed facility consists of four guyed towers with the following characteristics:

- Lattice-type triangular steel (2 feet per side)
- Red and white color scheme
- 5 guy levels per tower
- 3 guy wire anchor points per tower
- 1 microwave receiver dish on tower number 2
- Tower height 281 feet above ground level
- Complies with Federal Aviation Administration height and lighting provisions

Tower Lighting

Each tower will contain top beacons and side marker beacons at two levels. The beacons would be lit in accordance with the U.S. Department of Transportation, Federal Aviation Administration (FAA) Advisory Circular on Obstruction Marking and Lighting. The obstruction beacons are classified as medium intensity and have the following characteristics:

- Red color
- Light Emitting Diode (LED) type
- Synchronized nighttime blinking pattern with 20 flashes per minute (no daytime lighting)
- 360 degree horizontal beam pattern
- Illumination limited to 3 percent of maximum output at 3 degrees above and below the horizontal beam that minimizes stray light
- Effective intensity of 2,000 candela
- Internal photocell for automatic daytime shutoff

Ancillary Structure

Ancillary structures consist of a single 12 ft by 27 ft by 10 ft pre-fabricated concrete transmission equipment building; a 27 ft by 41 ft by 10 ft concrete masonry unit (CMU) wall surrounding the transmission equipment structure; an adjoining 13 ft by 32 ft by 10 ft CMU generator enclosure; and underground utility feeds and tower connections.

The CMU generator enclosure in the equipment building is provided for a self-contained, trailer-mounted portable generator in the event a long-term power outage should occur lasting several days or longer. The power generator contains an internal fuel tank; no external fuel tank is required and no fuel would be stored onsite.

1.3.2 - Landscaping and Onsite Access Roads

No ornamental landscaping is proposed. Small portions proposed for grading will be reseeded.

The existing dirt access roads surrounding the Project site would be repaired and improved where necessary to maintain adequate access to the site during the construction and operational phases including emergency access via Black Star Canyon Road.

Site Access

Skyline Drive is the proposed vehicular access to the Project site for both the short-term construction phase and long-term operational phase. Skyline Drive is proposed because it represents a shorter route to the site than Black Star Canyon Road. In addition, the other communications facilities identified below in Section 1.5, Environmental Setting also use Skyline Drive. Black Star Canyon Road would be available for secondary emergency access, if needed.

Offsite Improvements

Utility trenching offsite will extend generally southwest along Black Star Canyon Road, with all trenching on adjacent parcels occurring within the boundaries of the improved road easements.

Grading Concept

Grading on the site is limited to preparing the pad for the equipment building and bases for the radio towers and repair of the existing onsite access roads. The estimated earthwork quantities are 34 cubic yards (CY) of cut and 34 CY of fill, representing a balanced soil concept; therefore, no import or export of soil is proposed or required. Utility trenching would occur from one to three feet below ground surface.

Removal of Existing Onsite Structures

Removal of approximately 20 amateur radio station towers and the abandoned 1,200 square-foot single-story structure are proposed.

Construction Schedule

Table 2 below provides a detailed schedule of the proposed construction activities.

Table 2: Construction Schedule

Activity	Duration (Days)¹
Removal of Abandoned Radio Building and Towers	1
Site Preparation (Clearing and Grubbing)	2
Excavation	4
Foundation Installation	5
Tower Erecting (assembled and constructed onsite)	8
Utility Trenching (Onsite and Offsite)	10
Existing Onsite Dirt Road Repair	5

Table 2(cont.): Construction Schedule

Activity	Duration (Days) ¹
Ground Radial Installation	5
Prefab Equipment Building and Surrounding Shelter Placement	1
CMU Walls Installation and Security Fencing	10
Total	51
<p>Note: ¹ Duration represents actual construction days. The total construction period is estimated to be 120 days with approximately 40 days of no construction activities occurring on the project site. Source: Crawford Broadcasting Company, April 2011.</p>	

1.4 - Entitlements and Approvals

The proposed Project will require discretionary approval from the Orange County Planning Commission for the granting of a conditional use permit. In addition to this discretionary action, the following non-discretionary permits are required or may be required:

- Building Permit (required)
- Grading Permit (required)
- Retaining wall permit (may be required)
- Encroachment Permit (may be required)

1.5 - Environmental Setting

The Project site is located in the Santa Ana Mountains at an elevation ranging from approximately 2,480 feet Above Mean Sea Level (AMSL) to approximately 2,860 feet AMSL. The Santa Ana Mountains are a short peninsular mountain range extending for approximately 36 miles generally between Orange and Riverside counties. The majority of the Santa Ana Mountains is within the Trabuco Ranger District of the Cleveland National Forest, although many private in-holdings within the Cleveland National Forest exist.

With the exception of the access roads, the neighboring land north and east of the Project remains generally undeveloped with native and non-native vegetation (Exhibit 4). A dilapidated farmhouse and several out buildings are located along the access road immediately west of the site. The general area, however, is currently home to the following communication installations owned by other companies providing service for multiple commercial carriers and a U.S. government radar facility operated by the National Oceanic and Atmospheric Administration (NOAA):

Facility	Type	Distance
Sierra Peak Communication Site	Cellular	1.60 miles northwest
NOAA (US Government)	Doppler Radar	0.85 miles south
Pleasants Peak Communication Site	Cellular	2.90 miles southeast
Modjeska Peak Communication Site	Cellular	9.50 miles southeast
Santiago Peak Communication Site	Cellular	10.50 miles southeast

The Project site contains 20 untreated wood radio towers and an abandoned 1,200 square foot single-story structure associated with the previous amateur radio installation. The poles remaining on the site, or the remnants thereof, were used to support amateur radio open-wire transmission lines or for other purposes. No commercial power currently exists or has existed on the Project site. The existing abandoned structure and site have been subjected to vandalism and illegal dumping of refuse. Several onsite access roads exist on the site. Exhibits 5a through 5e provide photos of the existing onsite access roads. Photo 5 on Exhibit 5c provides a photograph of the onsite poles. Photo 9 on Exhibit 5e provides a photo of the abandoned amateur radio building.

With the exception of the existing improved graded area, both the site and surrounding properties consist of moderately sloping natural terrain.

Soils found onsite consist primarily of Sand Clay top soils over Siltstone Bedrock. Observed surface soils throughout the site have been previously graded or otherwise disturbed and compacted as a result of prior development. Non-native grassland and disturbed areas consisting of bare ground dominate the land, providing habitat for wildlife species that commonly occur in upland, disturbed, non-native grassland, chaparral, and sage scrub habitats.

Existing vehicular access to the site is provided by any of the following roads: Black Star Canyon Road and Main Divide Truck Trail from the south, Skyline Drive to the east, and Leonard Road to the northwest. All of these roadways are unimproved, rural roads and privately owned roads. No private vehicular ingress/egress easements serve the site. However, public roadway easements for Black Star Canyon Road and Main Divide Truck Trail are located on the site.



Source: Census 2000 Data, The CaSIL, MBA GIS 2011.



Michael Brandman Associates

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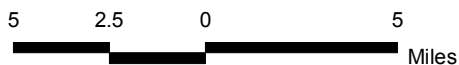
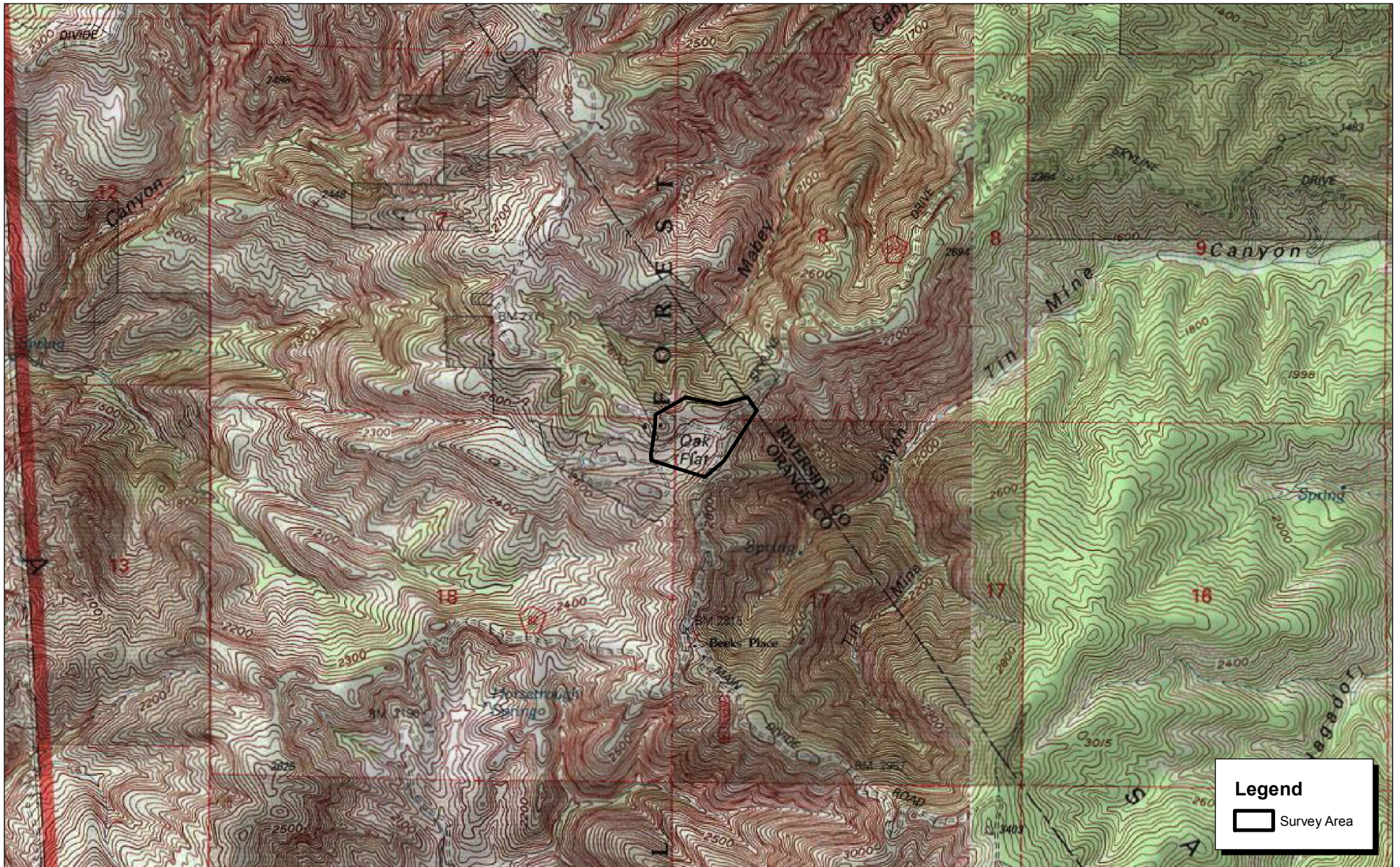


Exhibit 1 Regional Location Map

COUNTY OF ORANGE • KBRT - OAK FLAT TOWERS
INITIAL STUDY



Source: TOPO! USGS Black Star Canyon, CA and Corona South, CA (1997) 7.5' DRG.



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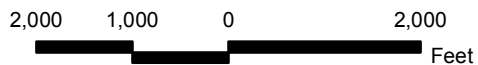
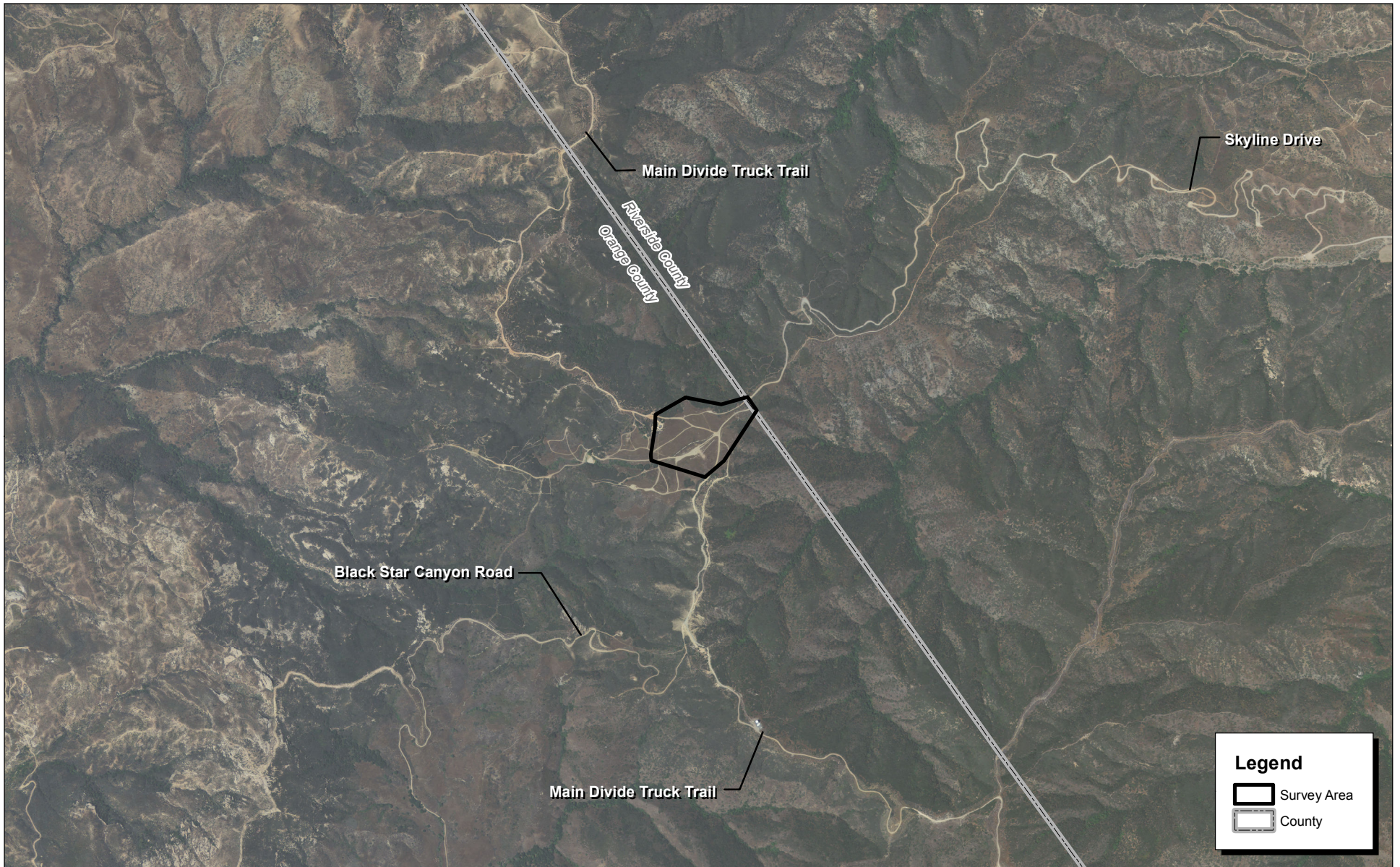


Exhibit 2 Local Vicinity Map Topographic Base

COUNTY OF ORANGE • KBRT - OAK FLAT TOWERS
INITIAL STUDY



Source: Orange County NAIP, 2009.



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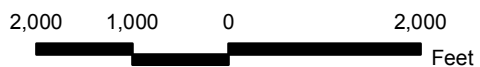
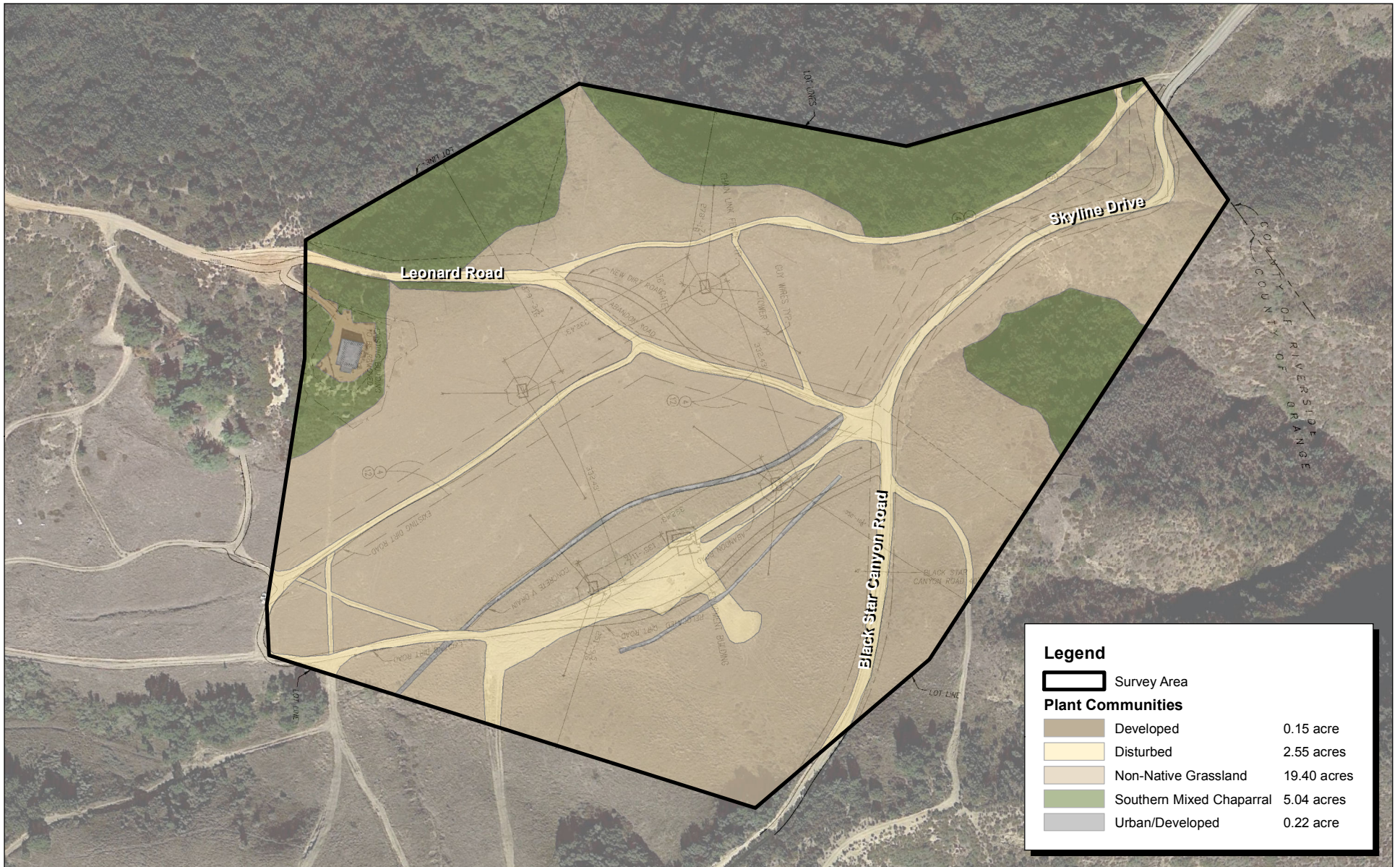
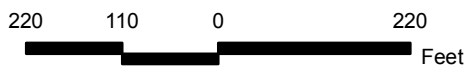


Exhibit 3 Local Vicinity Map Aerial Base

COUNTY OF ORANGE • KBRT - OAK FLAT TOWERS
INITIAL STUDY



Source: Google Earth Pro, 2009. Ray Grage & Associates, 2009.



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Exhibit 4 Biological Resources Map

COUNTY OF ORANGE • KBRT - OAK FLAT TOWERS
INITIAL STUDY



Photograph 1: East facing view of proposed equipment location.



Photograph 2: North facing view of proposed equipment location.

Source: Michael Brandman Associates, 2011.



Michael Brandman Associates

40190001 • 04/2011 | 5a_site_photos_1and2.cdr

Exhibit 5a Site Photographs 1 and 2

COUNTY OF ORANGE • KBRT - OAK FLAT TOWERS
INITIAL STUDY



Photograph 3: West facing view from proposed equipment location.



Photograph 4: Northwest facing overview of proposed Tower 1 location.

Source: Michael Brandman Associates, 2011.



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40190001 • 04/2011 | 5b_site_photos_3and4.cdr

Exhibit 5b Site Photographs 3 and 4

COUNTY OF ORANGE • KBRT - OAK FLAT TOWERS
INITIAL STUDY



Photograph 5: East facing view of proposed Tower 1 location.



Photograph 6: South facing view of proposed Tower 2 location.

Source: Michael Brandman Associates, 2011.



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40190001 • 04/2011 | 5c_site_photos_5and6.cdr

Exhibit 5c Site Photographs 5 and 6

COUNTY OF ORANGE • KBRT - OAK FLAT TOWERS
INITIAL STUDY



Photograph 7: South facing view of proposed Tower 3 location.



Photograph 8: West facing view of proposed Tower 4 location.

Source: Michael Brandman Associates, 2011.



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40190001 • 04/2011 | 5d_site_photos_7and8.cdr

Exhibit 5d Site Photographs 7 and 8

COUNTY OF ORANGE • KBRT - OAK FLAT TOWERS
INITIAL STUDY



Photograph 9: West facing overview of proposed Tower 4 location.



Photograph 10: Southwest facing overview of the proposed Towers 2 and 3, and proposed equipment locations.

Source: Michael Brandman Associates, 2011.



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Exhibit 5e Site Photographs 9 and 10

COUNTY OF ORANGE • KBRT - OAK FLAT TOWERS
INITIAL STUDY



Visual Simulation 1



Visual Simulation 2



Visual Simulation 3

Source: Artistic Engineering.

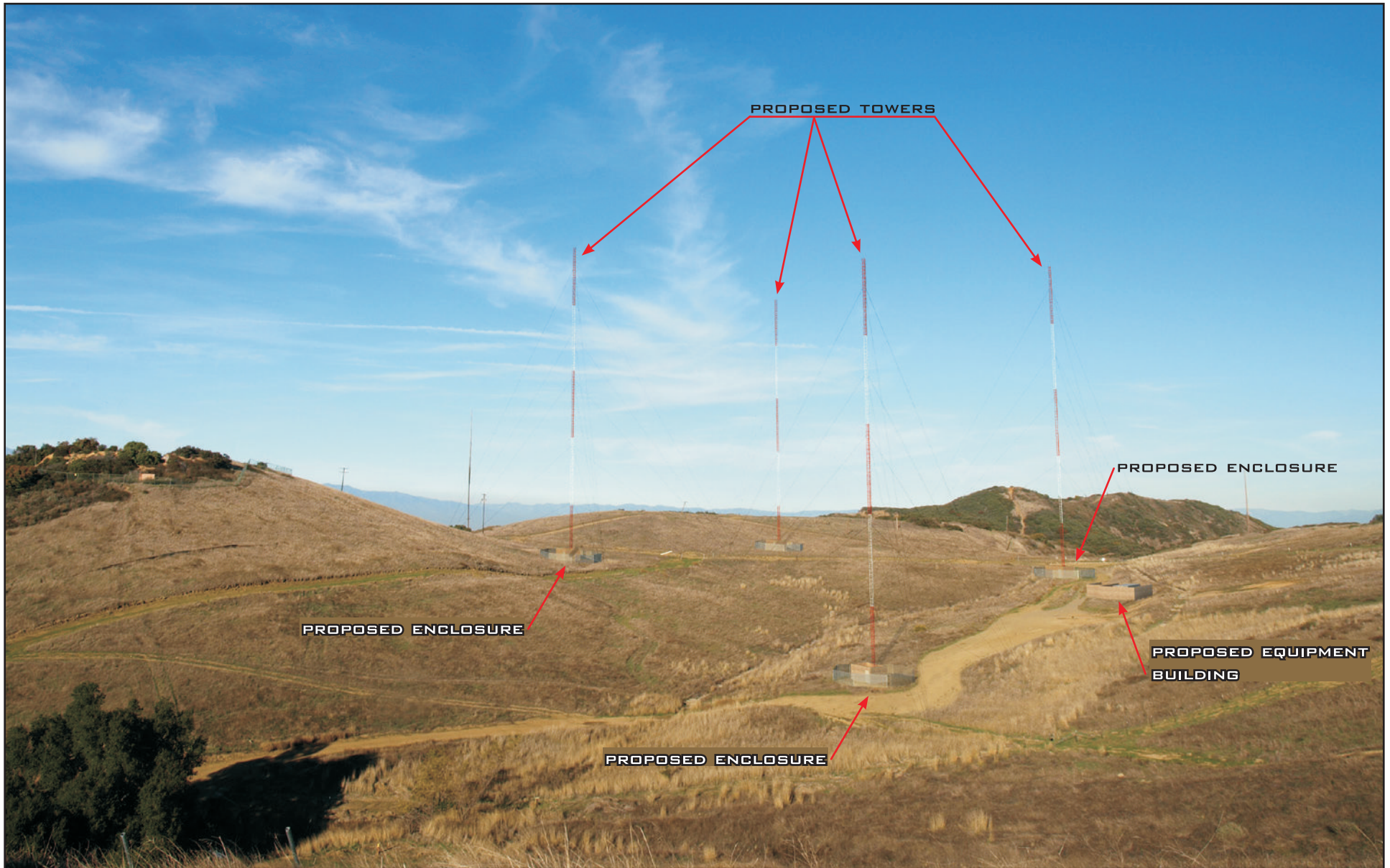


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Exhibit 6 Visual Simulation Key Map

COUNTY OF ORANGE • KBRT - OAK FLAT TOWERS
INITIAL STUDY



Source: Artistic Engineering.

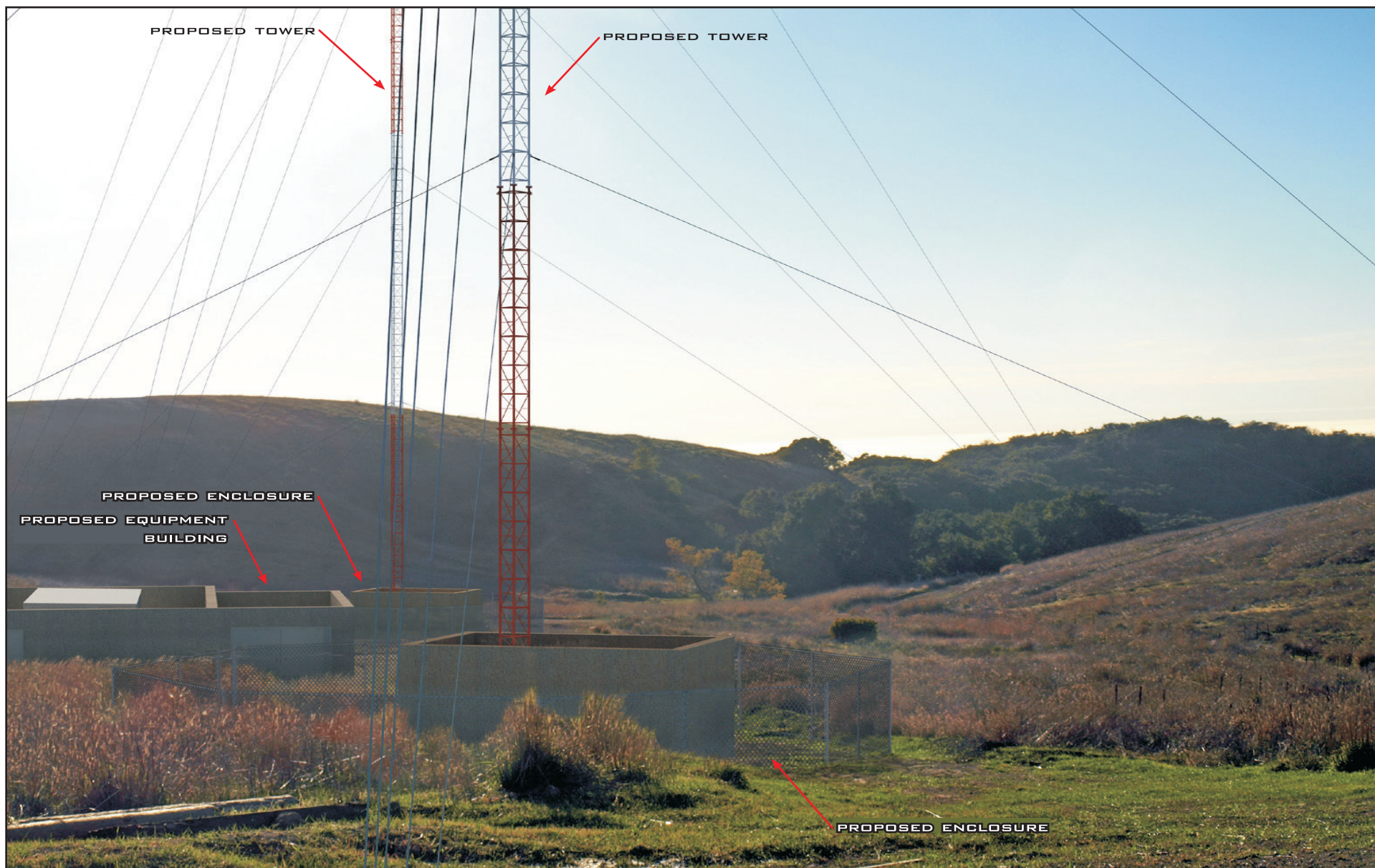


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Exhibit 6a
Visual Simulation 1
Looking Northeast From Adjacent Trail

COUNTY OF ORANGE • KBRT - OAK FLAT TOWERS
INITIAL STUDY



Source: Artistic Engineering.

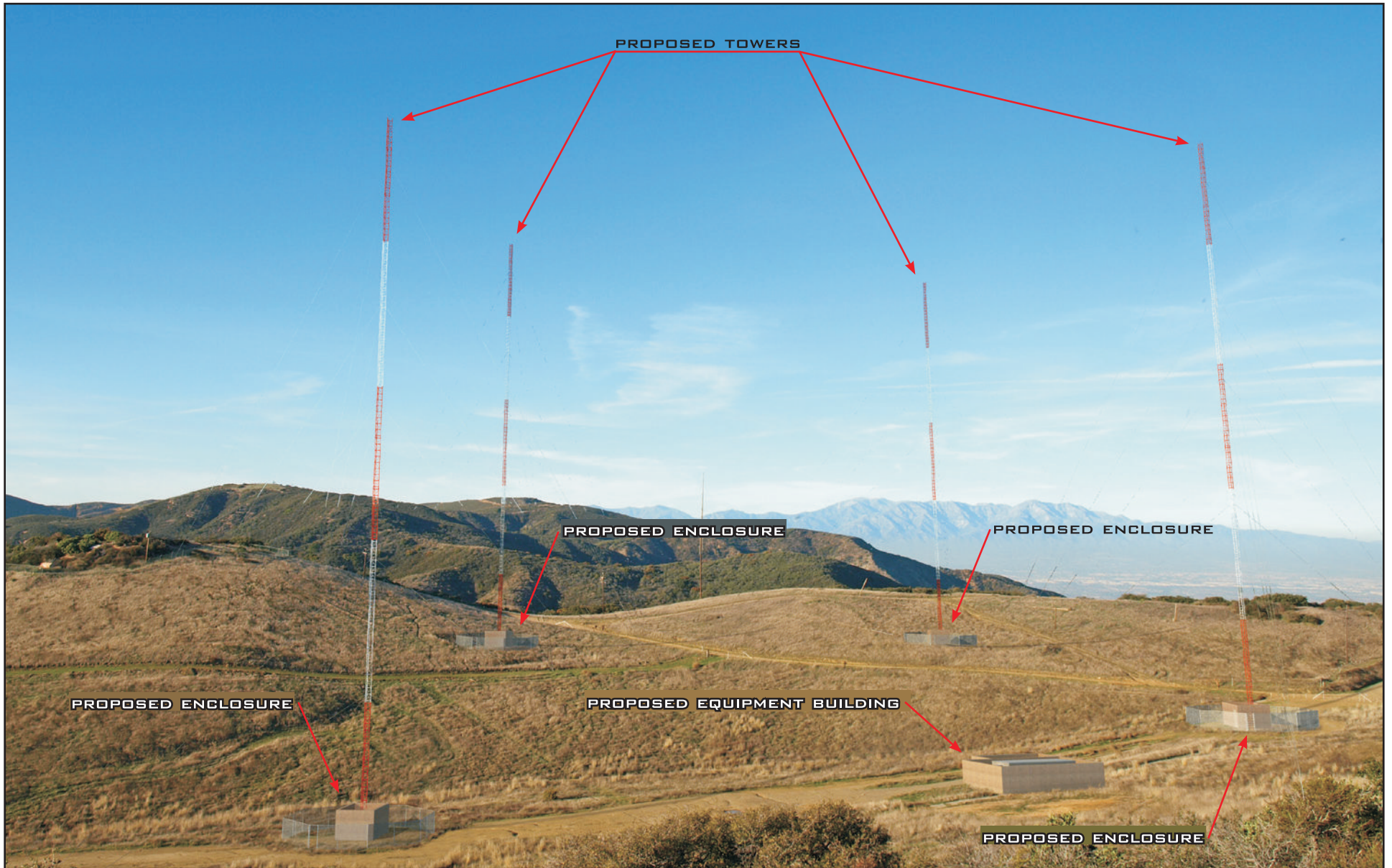


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Exhibit 6b Visual Simulation 2 Looking Southwest From Black Star Canyon Road

COUNTY OF ORANGE • KBRT - OAK FLAT TOWERS
 INITIAL STUDY



Source: Artistic Engineering.

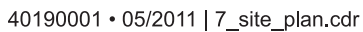
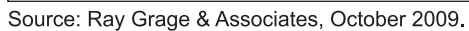


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Exhibit 6c Visual Simulation 3 Looking Northwest From Black Star Canyon Road

COUNTY OF ORANGE • KBRT - OAK FLAT TOWERS
INITIAL STUDY



SECTION 2: ENVIRONMENTAL CHECKLIST

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Aesthetics <i>Would the project:</i>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Agriculture and Forestry Resources <i>Would the project:</i>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of Farmland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3. Air Quality <i>Would the project:</i>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Biological Resources <i>Would the project:</i>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Cultural Resources <i>Would the project:</i>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Geology and Soils <i>Would the project:</i>				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Greenhouse Gas Emissions <i>Would the project:</i>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Hazards and Hazardous Materials <i>Would the project:</i>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Include a new or retrofitted storm water treatment control Best Management Practice (BMP), (e.g. water quality treatment basin, constructed wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors and odors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Expose people to risk from transmitting tower failure?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
k) Expose people to elevated electromagnetic fields in excess of adopted guidelines?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Hydrology and Water Quality <i>Would the project:</i>				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially alter drainage patterns of the site or area including the alteration of the course of a stream or river, in manner which would result in: <ul style="list-style-type: none"> i. substantial erosion or siltation on- or offsite? ii. a substantial increase in the rate or amount of surface runoff in a manner which would result in flooding on- or offsite? 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area including through the alteration of the course of a stream or river, in a manner which would result in: substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Land Use and Planning <i>Would the project:</i>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Mineral Resources <i>Would the project:</i>				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Noise <i>Would the project result in:</i>				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. Population and Housing <i>Would the project:</i>				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
14. Public Services <i>Would the project:</i>				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15. Recreation <i>Would the project:</i>				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16. Transportation/Traffic <i>Would the project:</i>				
a) Result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Conflict with an applicable congestion management program, including, but not limited to level of service standard and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Conflict with adopted policies, plan or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17. Utilities and Service Systems <i>Would the project:</i>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18. Mandatory Findings of Significance				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

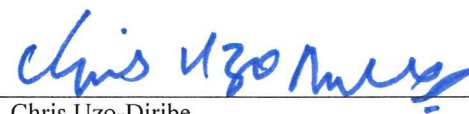
Environmental Factors Potentially Affected					
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.					
<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry Resources	<input type="checkbox"/>	Air Quality
<input type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Geology/Soils
<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards/Hazardous Materials	<input type="checkbox"/>	Hydrology/Water Quality
<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Noise
<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Transportation/Traffic	<input type="checkbox"/>	Utilities/Services Systems	<input type="checkbox"/>	Mandatory Findings of Significance

Environmental Determination

Based upon the evidence in light of the whole record documented in the attached environmental checklist explanation, cited incorporations and attachments, I find that the proposed project:

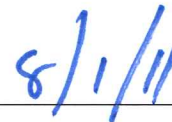
- ☐ **Could not** have a significant effect on the environment, and a negative declaration (ND) will be prepared pursuant to CEQA Guidelines Article 6, 15070 through 15075.
- ☒ **Could have** a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures have been added to the project or revisions in the project have been made by or agreed to by the project proponent. A Mitigated Negative Declaration (MND) will be prepared pursuant to CEQA Guidelines Article 6, 15070 through 15075.
- ☐ **May have** a significant effect on the environment, which has not been analyzed previously. Therefore, an environmental impact report is required.
- ☐ **May have** a "potentially significant effect on the environment" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measure based on the earlier analysis as described on attached sheets. An environmental impact report is required, but it must analyze only the effects that remain to be addressed.
- ☐ **Although the** proposed project could have a significant effect on the environment, because all potentially significant effects 1) have been analyzed adequately in an earlier EIR or ND/MND pursuant to applicable standards, and 2) have been avoided or mitigated pursuant to that earlier EIR/ND/MND, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.
- ☐ **Although the** proposed project could have a significant effect on the environment, because all potentially significant effects 1) have been analyzed adequately in an earlier EIR or ND/MND pursuant to applicable standards, and 2) have been avoided or mitigated pursuant to that earlier EIR/ND/MND, including revisions or mitigation measures that are imposed upon the proposed project. **However, minor additions and/or clarifications are needed** to make the previous document adequate to cover the project, which are documented in this Addendum to the earlier CEQA Document (Sec. 15164).

Signed



Chris Uzo-Diribe
OC Communities Planning

Date



SECTION 3: DISCUSSION OF ENVIRONMENTAL EVALUATION

1. Aesthetics

Would the project:

a) Have a substantial adverse effect on a scenic vista?

The County of Orange General Plan does not specifically identify the Oak Flat/Black Star Canyon area as containing scenic vistas; however, it does list the Cleveland National Forest area as an “Open Space High-Priority Area.” The General Plan identifies the gentle terrain of the Cleveland National Forest foothills as possessing both outstanding scenic qualities and adequate access points; however, primarily due to the rural and remote location of the proposed Project and adjacent lands, the probability of publicly accessible scenic vistas occurring in the area is unlikely.

The Transportation Element of the Orange County General Plan identifies Santiago Canyon Road as a Type I Viewscape Corridor from Jamboree Road on the west to Live Oak Canyon Road on the east, representing approximately 13 miles in length. The Transportation Element defines a Type I Viewscape Corridor is defined as follows:

A viewscape corridor is a route which traverses a corridor within which unique or unusual scenic resources and aesthetic values are found. This designation is intended to minimize the impact of the highway and land development upon the significant resources along the route. Safety roadside rests and vista points should be developed, when feasible and where appropriate, to enhance any exceptional scenic values. Development of the right-of-way should, to the extent possible, follow the adopted Viewscape Typical Section. If utilization of the typical section would destroy the scenic amenities of the corridor, a modification of the standard can be considered. The appropriate width and development of the right-of-way shall be discussed/considered in the scenic corridor implementation plans.

The Resources Element of the Orange County General Plan includes Santiago Canyon Road among the scenic areas along with Ortega Highway, Chapman Avenue, and locations along the coast. The Resources Element states the preservation of scenic highways vantage points has been limited to a few turnouts.

Because of the greater distances between the Project site and the more accessible foothill areas located approximately seven miles away, as well as the topography and sight lines that are obscured by surrounding ridges, the proposed radio towers would likely be visible from only a handful of vantage points outside of the immediate Project site. Because the proposed Project is not located adjacent or in close proximity to Santiago Canyon Road, impacts to this Viewscape Corridor would not be impacted and less than significant impacts to this resource would result.

The Resources Element of the Orange County General Plan identifies the natural setting of Orange County provides a diverse combination of mountains, hills, flatlands, and shoreline. These landforms and associated major canyons, ridgelines, and coastal areas, all contribute to the diversity of Orange County's environment. Landforms are distinctive natural topographic features of the Orange County area and must be considered natural as well as aesthetic resources. Fremont Canyon is identified as adding interest to the relatively undeveloped landscape.

Fremont Canyon begins approximately 0.25 mile south of Santiago Dam and extends in a general northeasterly direction for approximately six miles and ends approximately one mile below Sierra Peak on the Orange/Riverside County boundary. The project site is located approximately 5.50 miles from the mouth of the canyon below Santiago Dam at its farthest and approximately 1.50 miles northwest of the site at its closest. Terrain line of sight profiles were calculated from multiple azimuths from the Project site to determine the visibility of the proposed radio towers from this resource. The combination of the depth of the canyon below the immediately surrounding elevations above the canyon and intervening ridgelines obscure the proposed radio towers and result in less than significant impacts to Fremont Canyon.

The Main Divide Trail is located in the vicinity of the project site and, where the trail uses the Main Divide Truck Road, adjacent to the site. The Recreation Element of the Orange County General Plan considers the trails "multi-purpose" and available for equestrian, pedestrian (walking, hiking, and jogging), and mountain biking. The Orange County General Plan Appendix describes the trail as follows:

The Main Divide Trail commences at the ridgeline location of the Coal Canyon-Gypsum Canyon Trail and extends easterly into the Cleveland National Forest. It continues southeasterly along the Main Divide Truck Road, generally along the ridge of the Santa Ana Mountains past Santiago Peak to the Riverside County line northwesterly of Ortega Highway where other trails extend easterly into Riverside County and southerly into San Diego County. This trail is approximately 28 miles long and is almost entirely within the Cleveland National Forest.

The length of the trail combined with the intervening ridgeline would obscure the tower visibility for the majority of the trail. Users of the trail may have intermittent views of the towers but distances past a few miles the towers would be barely visible. As a result, Project implementation would not substantially affect the aesthetics resources available from trail users.

Impact Conclusion: Potential impacts on a scenic vista would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?

Within the Project region, the nearest State-designated Scenic Highway is State Route (SR) 91, between SR-55 and Weir Canyon Road. The County of Orange designates SR-91 (Riverside Freeway) between SR-55 (Costa Mesa Freeway) and the Riverside County Line as a Scenic Highway/Viewscape Corridor. The County of Riverside designates SR-91 between the Orange County Line and Interstate 15 (Ontario Freeway) as State Eligible. Sight line studies from locations in both the County of Orange and County of Riverside determined that only SR-91 at Auto Center Drive in the City of Corona would have a direct line of sight to the Project. Because of the distance, the small cross-section of the radio tower, and open lattice-type construction of the radio towers, the Project would be almost imperceptible to an observer from this vantage point. Furthermore, this portion of SR-91 is not a State-designated Scenic Highway and only listed as State Eligible by the County of Riverside. Therefore, potential impacts would be less than significant.

Impact Conclusion: Potential impacts to scenic resources would be less than significant.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

The Project site contains 20 untreated wood radio towers and an abandoned 1,200 square foot single-story structure. The building and site have been subjected to illegal vandalism and unauthorized, illegal dumping that has contributed to a negative and unsightly site quality.

During the short-term construction phase of the Project, construction vehicles, equipment, and materials will be located on the site. These elements would temporarily degrade the visual character and quality of the site. However, these negative aesthetic construction elements would be removed at the conclusion of the construction phase and not remain on the site. In addition, the existing building and radio towers along with any illegally dumped materials would be removed during the construction phase. Therefore, impacts to the character and quality of the site during the construction phase would be less than significant.

Historical use of the Project site has included radio broadcasting, including both commercial broadcast and an amateur radio station complex. The previous commercial radio station included three 300-foot towers, which have since been removed. In addition to the remaining improvements, several access roads have been graded into the site that served the previous uses. Overall, the Project site is characteristic of a disturbed site (Refer to Exhibits 5a through 5e, and Exhibit 6).

The proposed structures, consisting of the equipment building and radio tower enclosures, would be painted with a neutral, earth-tone color that would blend well with the site and surroundings minimizing the visual contrast. Utility feeds, tower connections, and all other infrastructure would be located underground, which would also minimize the contrast of the proposed site improvements with

the surroundings. The radio towers' red and white color scheme is required by the FAA for daytime flight safety.

Exhibit 6 provides a visual simulation of the proposed tower locations on the Project site. Exhibits 6a through 6c provide visual simulations of the towers from three different directions. The towers are not located on the highest points on the Project site thereby minimizing visibility from offsite visual receptors. Exhibits 6a and 6c demonstrate the proposed building and tower enclosure paint schemes minimize the contrast to the onsite setting. The tower supporting guy wires are visible in Exhibit 6b at a close distance as shown on simulation 2 on Exhibit 6. At a farther distance, as shown in Exhibit 6c and simulation 3 on Exhibit 6, these wires are barely visible. Offsite visual receptors would not be able to see the supporting guy wires. The four towers, as demonstrated in Exhibits 6a and 6c, only minimally intrude on the visual landscape and do not represent "structure massing." Structural massing, if present, would have the potential to block or interrupt views from the Project site to offsite surroundings and, conversely, from the offsite surroundings to the site. The approximate 24-inch face width (each tower) combined with the "open" lattice structure (i.e., not solid) further minimizes structural massing and provides visual access through the tower (refer to Exhibit 6b).

The Project proposes a use that is similar in nature to NOAA's National Weather Service and a nearby commercial site. Project implementation continues the historic use of the site and does not propose a new, different use or change in the visual character or quality of the site or surroundings.

Impact Conclusion: The potential to substantially degrade the character and quality of the site and surrounding area would be less than significant during the short-term construction phase and long-term operational phase. Moreover, the removal of the abandoned building, radio towers and accumulated refuse would result in a beneficial impact on the Project site and immediate surroundings.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

During the short-term construction phase of the Project, construction vehicles, equipment, and materials will be located on the site and have the potential to be a source of glare. Construction activities are not anticipated to occur during nighttime hours; therefore, no impacts to nighttime lighting would occur during the construction period. These construction elements would be removed at the conclusion of the construction phase and not remain on the site. Therefore, impacts related to light and glare during the short-term construction phase would be less than significant.

The proposed Project would introduce a new source of light on the Project site. The FAA requires red obstruction lighting to be located on the radio towers for use at nighttime for flight safety. Obstruction nighttime lighting (no daytime lighting) would be located on each tower using Light Emitting Diode (LED) technology. The LED obstruction lighting will be synchronized among the four towers with a blinking rate of 20 flashes per minute. This technology achieves the FAA

mandated brightness by focusing the light beam outward from the beacons horizontally within a three-degree beam spread. At angles lower than ten degrees below the horizontal, the illumination intensity is less than 3 percent of that on the horizon. For example, of the 2,000 candelas produced by the LED light, only 3 percent of this, or 60 candelas, would be visible below the horizontal projection. This is equivalent to a 44-watt light bulb or two vehicle brake lights (each representing approximately 30 candelas). Therefore, the LED lights would be visible but appear dim from grade level below the towers and adjacent to the site. Because the site occurs at a higher elevation than populated areas at lower elevations, these areas would receive 3 percent of the total output of the LED lights. The intervening ridgelines would either completely obstruct direct views of the towers and or for those with direct views of the towers the lights would appear barely visible on clear nights.

In regards to glare impacts, security fencing and portions of the radio towers could potentially contribute a minimal amount of the glare to the area; however, the majority of the radio towers, structures, and associated components would be painted, minimizing or negating any glare effects.

Impact Conclusion: The introduction of the lighted towers would not adversely affect day or nighttime views and would result in less than significant impacts to the area during both the short-term construction phase and long-term operational phase.

Section 1 References

Crawford Broadcasting Company. Use Permit Application. February 7, 2011.

Orange, County of. General Plan. December 9, 2008.

Ray Grage. Written Communication. Ray Grage Associates. May 18, 2011.

Riverside, County of. General Plan. October 7, 2003.

TWR Lighting, Inc. Datasheet – L350-864-G Medium Intensity Red Synchronized Flashing LED Obstruction Light.

U.S Department of Transportation, Federal Aviation Administration, Advisory Circular No. AC 70/7460-1K: Obstruction Marking and Lighting. February 1, 2007.

2. Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

- a) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

The proposed Project is zoned by the County of Orange General Plan as A-1, General Agricultural. The site is not identified as Prime Farmland or Unique Farmland of Statewide Importance (Farmland).

Impact Conclusion: No impacts related to Farmland would result from Project implementation.

- b) **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

The proposed Project is zoned by the County of Orange as A-1, General Agricultural. As defined by the County's zoning ordinance, communication transmitting, reception, or relay facilities are principal uses permitted in an A-1 zone subject to the granting of a site development permit. To accommodate the necessary tower height, a use permit subject to planning commission approval is required. No known Williamson Act lands occur on or adjacent to the Project site.

Impact Conclusion: No impacts related to conflicts with existing agricultural zoning or Williamson Act contracts would result from Project implementation.

- c) **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

The proposed Project is not zoned as forest land, timberland, or timberland zoned Timberland Production. Project development would not conflict with existing zoning for such aforementioned uses. Refer to Response 2b above.

Impact Conclusion: No impacts to forest land or timberland would result from Project implementation and no impacts would result.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

The proposed Project is not zoned as forest land, and as such, would not result in the loss or conversion of forest land.

Impact Conclusion: No forest land would be lost or converted resulting from Project implementation and no impacts would result.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Uses on and adjacent to the Project site do not include Farmland. Development of the Project would not involve other changes in the environment that would result in conversion of Farmland to non-agriculture use. All of the Project improvements would occur on the site that has been previously disturbed and occupied by similar uses and within existing access roadways.

Impact Conclusion: Project implementation would not result in impacts related to the conversion of Farmland or forest land to non-Farmland or non-forest use.

Section 2 References

Orange, County of. General Plan. December 9, 2008.

3. Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. The Project site is located in the South Coast Air Basin, which is within the South Coast Air Quality Management District (SCAQMD) jurisdiction. Therefore, guidance and thresholds recommended by the SCAQMD are utilized in the analysis. For background information on pollutants, greenhouse gases, and regulatory information, please refer to the Air Quality and Greenhouse Gas Background Information and Model Output contained in Appendix A.

The South Coast Air Basin is in non-attainment for nitrogen dioxide, ozone, and particulate matter (PM₁₀ and PM_{2.5}), which means that the U.S. Environmental Protection Agency (EPA) has determined there has been the requisite number of days when the concentration of that pollutant has exceeded the ambient air quality standard. Ambient air quality standards for criteria pollutants are set by the EPA and the California Air Resources Board (ARB) to protect the health of sensitive individuals. Criteria pollutants include ozone, PM₁₀, PM_{2.5}, carbon monoxide (CO), nitrogen dioxide, lead, and sulfur dioxide. Ozone is formed through reactions of volatile organic compounds (VOCs), nitrogen oxides (NO_x), and sunlight.

To assist Lead Agencies in the analysis of Project-related air pollutants, the SCAQMD recommends use of regional and localized significance thresholds (South Coast Air Quality Management District 2011). If Project emissions are over the thresholds, the Project would result in a significant impact.

Effective April 12, 2010, EPA promulgated a new federal ambient air quality standard for the annual average nitrogen dioxide. The current SCAQMD significance thresholds do not take into account this new standard. The SCAQMD may update its significance thresholds for NO_x and nitrogen dioxide; however, there is no indication regarding what the new thresholds will be. The new federal standard of 0.100 ppm is based on the 3-year average of the 98th percentile of the daily maximum 1-hour average. The state standard is 0.18 ppm, which is not to be exceeded at all. Therefore, the two cannot be easily compared. This analysis uses the current SCAQMD thresholds to determine significance for nitrogen dioxide and NO_x.

Short-Term Construction Phase

Short-term impacts refer to emissions generated during construction because they occur on a short-term basis and last only during the period of construction. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from onsite and offsite activities. Onsite emissions principally consist of exhaust emissions (NO_x, SO_x, CO, VOC, PM₁₀, and PM_{2.5}) from heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM₁₀) from disturbed soil. Offsite emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (PM₁₀ and PM_{2.5}).

CalEEMod was released by the SCAQMD in March, 2011. It is up to the lead agencies to determine when the use of CalEEMod is appropriate. For the Project, the construction emissions were derived using URBEMIS2007 and other emission factors as described in the spreadsheets in the Air Quality and Greenhouse Gas Background Information and Model Output (Appendix A). CalEEMod and URBEMIS both use emission factors from EMFAC2007; the differences for purposes of this Project are negligible.

Table 3 summarizes onsite and offsite construction-related emissions and compares the emissions with the regional significance threshold. As shown in the table, the emissions do not exceed the threshold.

Table 3: Construction Regional Air Pollutant Emissions

Source	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Offsite haul trucks (6/day)*	1.5	11.4	10.2	0.0	96.3	10.0
Offsite worker (5/day)*	0.3	0.3	2.5	0.0	19.8	2.0
Demolition	1.5	10.8	6.9	0.0	1.7	0.9
Clearing and grubbing	2.4	18.7	11.4	0.0	21.0	5.1
Excavation, trenching, onsite dirt road repair	2.4	18.7	11.4	0.0	21.0	5.1
Foundation installation	0.7	4.2	2.9	0.0	0.4	0.3
Tower erecting, ground radial installation, prefab placement, walls/fences	1.0	7.6	4.1	0.0	0.5	0.5
Maximum Daily Emissions**	4.2	30.4	24.1	0	137.1	17.1
Regional Significance Threshold	75	100	550	150	150	55
Significant Impact?	No	No	No	No	No	No
<p>Notes:</p> <p>* Onroad haul trucks and worker emissions are from exhaust and fugitive dust for vehicles traveling on the unpaved and paved roads. Although there would not likely be more than 30 haul trips, it is assumed for purposes of this analysis that there would be a maximum of 6 haul trips on one day. It is assumed that there would be 5 onroad worker trips on one day. The onroad emissions are part of each phase.</p> <p>** The maximum daily emissions include the maximum emissions plus the onroad emissions. Therefore, the maximum daily emissions occur during clearing and grubbing or during excavation and are those emissions plus the offsite haul trucks and offsite worker emissions.</p> <p>VOC = volatile organic compounds NO_x = nitrogen oxides CO = carbon monoxide SO_x = sulfur oxides PM₁₀ and PM_{2.5} = particulate matter Source: Refer to Appendix A.</p>						

Table 4 summarizes onsite construction-related emissions and compares the emissions with the localized significance threshold. As shown in the table, the emissions do not exceed the threshold.

Table 4: Construction Localized Air Pollutant Emissions

Source	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Demolition	1.3	9.0	5.5	0.0	0.6	0.6
Clearing and grubbing	2.3	18.6	10.6	0.0	21.0	5.1
Excavation, trenching, onsite dirt road repair	2.3	18.6	10.6	0.0	21.0	5.1
Foundation installation	0.7	4.2	2.9	0.0	0.4	0.3
Tower erecting, ground radial installation, prefab placement, walls/fences	1.0	7.6	4.1	0.0	0.5	0.5
Maximum Daily Emissions	2.3	18.6	10.6	0.0	21.0	5.1
Localized Significance Threshold	None	218	7,724	None	121	68
Significant Impact?	No	No	No	No	No	No
Notes: The localized significance threshold is for a 1-acre project in source receptor area 19 for a distance to the nearest sensitive receptor of 500 meters (South Coast Air Quality Management District 2009). Although the closest sensitive receptor appears to be 800 meters from the project, 500 meters is chosen to represent a worst-case scenario. VOC = volatile organic compounds NO _x = nitrogen oxides CO = carbon monoxide SO _x = sulfur oxides PM ₁₀ and PM _{2.5} = particulate matter Source: Refer to Appendix A.						

Long-Term Operational Phase

Operational emissions would occur once the Project is in operation. Emissions from motor vehicles refer to exhaust emissions from the light duty trucks that would go to and from the Project site. There would also be emissions from travel on unpaved Skyline Drive. There would be emissions from a generator that would operate in an emergency (it could operate for 24 hours per day) as well as during maintenance. For this analysis, it is assumed that the onsite emergency generator is EPA Tier 1 equipment and would operate for one hour per day once per week for maintenance purposes. Operational emissions from emission sources generated both onsite and offsite are shown in Table 5. As shown in the table, the Project's emissions would not exceed the SCAQMD's regional threshold.

Table 5: Regional Operational Emissions

Source	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Motor vehicles/trucks exhaust	0.3	2.0	2.7	0.0	0.1	0.1
Unpaved road dust	0.0	0.0	0.0	0.0	7.9	0.8

Table 5 (cont.): Regional Operational Emissions

Source	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Emergency generator (1 hour per day, Tier 1)	0.3	2.4	3.0	0.0	0.1	0.1
Total onsite and offsite emissions	0.6	4.4	5.7	0.0	8.1	1.0
Regional Significance Threshold	55	55	550	150	150	55
Significant Impact?	No	No	No	No	No	No
Notes: VOC = volatile organic compounds NO _x = nitrogen oxides CO = carbon monoxide SO _x = sulfur oxides PM ₁₀ and PM _{2.5} = particulate matter Source: Appendix A.						

Operational onsite emissions are shown in Table 6. As shown in the table, emissions are less than the thresholds.

Table 6: Onsite Operational Emissions

Source	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Emergency generator (1 hour per day, Tier 1)	0.3	2.4	3.0	0.0	0.1	0.1
Total onsite emissions	0.3	2.4	3.0	0.0	0.1	0.1
Localized Significance Threshold	None	218	7,724	None	29	17
Significant Impact?	No	No	No	No	No	No
Notes: The localized significance threshold is for a 1-acre project in source receptor area 19 for a distance to the nearest sensitive receptor of 500 meters (South Coast Air Quality Management District 2009). Although the closest sensitive receptor appears to be 800 meters from the project, 500 meters is chosen to represent a worst-case scenario. VOC = volatile organic compounds NO _x = nitrogen oxides CO = carbon monoxide SO _x = sulfur oxides PM ₁₀ and PM _{2.5} = particulate matter Source: Appendix A.						

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

According to the 1993 SCAQMD Handbook, there are two key indicators of consistency with the air quality management plan (AQMP):

1. **Indicator:** Whether the Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP. Project applicability: applicable and assessed below.
2. **Indicator:** A project would conflict with the AQMP if it will exceed the assumptions in the AQMP in 2010 or increments based on the year of project build-out and phase. Project applicability: not applicable. The Handbook indicates that key assumptions to use in this analysis are population number and location and a regional housing needs assessment. The parcel-based land use and growth assumptions and inputs used in the Regional Transportation Model run by the Southern California Association of Governments that generated the mobile inventory used by the SCAQMD for AQMP are not available. Therefore, this indicator is not applicable.

In addition to indicator 1 above, consistency with the AQMP will also be determined based on if the Project complies with applicable control measures, rules, and regulations, as discussed below.

Project's Contribution to Air Quality Violations

As shown in (b) below, the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Therefore, the Project is consistent with the AQMP according to this indicator.

Control Measures

The second indicator of whether the Project could conflict with or obstruct implementation of the air quality plan is by assessing the Project's compliance with the control measures in the 2003 and the 2007 AQMPs. Geographical areas in the state that exceed the federal air quality standards are called nonattainment areas. The Project area is in nonattainment for ozone, PM₁₀, PM_{2.5}, and nitrogen dioxide. State Implementation Plans (SIPs) show how each area will attain the federal standards. To do this, the SIPs identify the amount of pollutant emissions that must be reduced in each area to meet the standard and the emission controls needed to reduce the necessary emissions. On September 27, 2007, ARB adopted its State Strategy for the 2007 SIP. In 2009, the SIP was revised to account for emissions reductions from regulations adopted in 2007 and 2008 and clarifies ARB's legal commitment. The South Coast is currently 94 percent of the way towards achieving the 2014 emissions levels identified in its PM_{2.5} SIP. The SIP takes into account ARB rules and regulations. The Project will comply with applicable rules and regulations, including but not limited to those listed in Section 1.2.2 of the Air Quality and Greenhouse Gas Background Information and Model Output (Appendix A). Therefore, the Project is less than significant according to this indicator.

Impact Conclusion: Potential impacts related to implementation of an applicable air quality plan would be less than significant.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The localized analysis uses thresholds that represent the maximum Project emissions that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard (South Coast Air Quality Management District 2008). If the Project results in emissions that do not exceed the localized significance thresholds, it follows that those emissions would not cause or contribute to a local exceedance of the appropriate ambient air quality standard. The localized construction analysis (see Table 4) demonstrates that the Project would not exceed the localized significance thresholds for CO, nitrogen dioxide, PM₁₀, or PM_{2.5}. The operational emissions would not exceed the localized threshold, as shown in Table 6. Therefore, the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation during construction or operation.

Impact Conclusion: Project impacts related to air quality standards or violations would be less than significant.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

Section 15130(b) of the CEQA Guidelines is summarized as follows:

The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact. The following elements are necessary to an adequate discussion of significant cumulative impacts:

- 1) Either:
 - (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or
 - (B) A summary of projections contained in an adopted local, regional, or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect.

In accordance with CEQA Guidelines 15130(b), this analysis of cumulative impacts is based on a summary of projections analysis. This analysis considers the current CEQA Guidelines, which includes the recent amendments approved by the Natural Resources Agency and effective on

March 18, 2010. This analysis is based on the 2003 and 2007 AQMPs. The South Coast Air Basin is in nonattainment for ozone, particulate matter (PM₁₀ and PM_{2.5}), and nitrogen dioxide, which means that concentrations of those pollutants currently exceed the ambient air quality standards for those pollutants. When concentrations of ozone, PM₁₀, PM_{2.5}, and nitrogen dioxide exceed the ambient air quality standard, then those sensitive to air pollution (i.e., children, elderly, sick) could experience health effects such as decrease of pulmonary function and localized lung edema in humans and animals, increased mortality risk, and risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans.

Under the amended CEQA Guidelines, cumulative impacts may be analyzed using other plans that evaluate relevant cumulative effects. The AQMPs describe and evaluate the future projected emissions sources in the South Coast Air Basin and sets forth a strategy to meet both state and federal Clear Air Act planning requirements and federal ambient air quality standards. Therefore, the AQMPs are relevant plans for a CEQA cumulative impacts analysis. The 2003 AQMP updates the attainment demonstration for the federal standards for ozone and PM₁₀; replaces the 1997 attainment demonstration for the federal CO standard and provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal nitrogen dioxide standard that the South Coast Air Basin has met since 1992. The 2007 AQMP focuses on ozone and PM_{2.5}. The AQMP also incorporates significant new scientific data, emission inventories, ambient measurements, control strategies, and air quality modeling.

In accordance with CEQA Guidelines section 15064, subdivision (h)(3), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the Project will comply with the requirements in a previously approved plan or mitigation program. The Project would comply with the control measures in the 2003 and the 2007 AQMP and all of the SCAQMD's applicable rules and regulations. Under the CEQA Guidelines Amendments, the lead agency should explain how implementing the particular requirements in the plan, regulation, or program ensures that the Project's incremental contribution to the cumulative effect is not cumulatively considerable. To explain how implementing the requirements in the AQMPs ensures the Project's incremental contribution to the cumulative effect is not cumulatively consideration, the following three-pronged analysis was performed. To result in a less than significant impact, the following criteria must be true:

1. Regional analysis: emissions of nonattainment pollutants must be below the regional significance thresholds.
2. Summary of projections: the Project must be consistent with current air quality attainment plans including control measures and regulations.
3. Cumulative health impacts: the Project must result in less than significant cumulative health effects from the non-attainment pollutants.

The South Coast Air Quality Management District 1993 Handbook suggests three voluntary approaches to determine cumulative significance. The first approach is a 1-percent-per-year reduction (or 18 percent over 18 years to the year 2010) in Project emissions of VOC, NO_x, CO, PM₁₀, and SO_x. This approach is not straightforward and operational reductions are not easy to quantify. The second approach is not applicable because it relies on SCAQMD Regulation XV, which was repealed in 1995 and therefore is not applicable. The third approach is to reduce the rate of growth in vehicle miles traveled and trips. In this approach, the rate of growth in vehicle miles traveled and trips “should be held to the rate of population or household growth.” Data that was used by Southern California Association of Governments in the AQMP should be used in this approach; however, that data is not available. Therefore, the approaches in the 1993 SCAQMD Handbook are not used.

Criterion 1: Regional Analysis

If an area is in nonattainment for a criteria pollutant, then the background concentration of that pollutant has historically exceeded the ambient air quality standard. It follows that if a project exceeds the regional threshold for that nonattainment pollutant, then it would result in a cumulatively considerable net increase of that pollutant and result in a significant cumulative impact.

Geographical areas that exceed the air quality standards are called nonattainment areas. For additional information, refer to Section 1.1.3 of Appendix A. The South Coast Air Basin is in nonattainment for PM₁₀, PM_{2.5}, nitrogen dioxide, and ozone. Therefore, if the project exceeds the regional thresholds for PM₁₀, or PM_{2.5}, then it contributes to a cumulatively considerable impact for those pollutants. If the project exceeds the regional threshold for NO_x or VOC, then it follows that the project would contribute to a cumulatively considerable impact for ozone. If the project exceeds the NO_x threshold, it could contribute cumulatively to nitrogen dioxide concentrations.

The regional significance analysis of construction and operational emissions demonstrated that emissions are below the SCAQMD regional significance thresholds. Therefore, the Project does not contribute to a cumulative impact according to this criterion.

Criterion 2: Plan Approach

The geographic scope for cumulative criteria pollution from air quality impacts is the South Coast Air Basin, because that is the area in which the air pollutants generated by the sources within the basin circulate and are often trapped. The SCAQMD is required to prepare and maintain an AQMP and a State Implementation Plan to document the strategies and measures to be undertaken to reach attainment of ambient air quality standards. While the SCAQMD does not have direct authority over land use decisions, it is recognized that changes in land use and circulation planning are necessary to maintain clean air. The SCAQMD evaluated the entire Basin when it developed the AQMP.

According to the analysis contained in (a) above, the Project is consistent with the most recent AQMP and State Implementation Plan without mitigation. Therefore, the Project is less than significant according to this criterion.

Criterion 3: Cumulative Health Impacts

The Basin is in nonattainment for ozone, nitrogen dioxide, PM₁₀, and PM_{2.5}, which means that the background levels of those pollutants are at times higher than the ambient air quality standards. The air quality standards were set to protect public health, including the health of sensitive individuals (such as the elderly, children, and the sick). Therefore, when the concentration of those pollutants exceeds the standard, it is likely that some sensitive individuals in the population would experience health effects that were described in the Air Quality and Greenhouse Gas Background Information and Model Output Report (Appendix A). However, the health effects are a factor of the dose-response curve. Concentration of the pollutant in the air (dose), the length of time exposed, and the response of the individual are factors involved in the severity and nature of health impacts. If a significant health impact results from Project emissions, it does not mean that 100 percent of the population would experience health effects. The regional analysis (see Table 3 and Table 5) indicates that the Project would not exceed the SCAQMD regional significance thresholds. The Project would not result in cumulative health impacts.

Impact Conclusion: Project impacts related to a cumulatively considerable net increase of any non-attainment criteria pollutant would be less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

There are structures located at the intersection of Black Star Canyon Road and Main Divide Truck Trail, though it is unknown if they are inhabited. The structures are approximately 800 meters (2,600 feet) south of the Project site. If the structures are inhabited, the residents may be exposed to increased levels of fugitive dust from the passing employee and delivery truck vehicles. However, these emissions would be minor and would not be at a level to induce a negative response.

The localized construction analysis uses thresholds that represent the maximum emissions for a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard (South Coast Air Quality Management District 2008). The thresholds are developed based on the ambient concentrations of that pollutant for each source receptor area and on the location of the sensitive receptors. If the Project results in emissions under those thresholds, it follows that the Project would not cause or contribute to an exceedance of the standard. The standards are set to protect the health of sensitive individuals. If the standards are not exceeded at the sensitive receptor locations, it follows that the receptors would not be exposed to substantial pollutant concentrations. As identified in Table 4 and Table 6, the Project would not exceed the localized thresholds for CO, nitrogen dioxide, PM₁₀, or PM_{2.5}. Therefore, the Project

would not expose sensitive receptors to substantial pollutant concentrations of CO, nitrogen dioxide, PM₁₀, or PM_{2.5}.

The construction equipment would emit diesel particulate matter, which is a carcinogen. However, the diesel particulate matter emissions are short-term in nature. Determination of risk from diesel particulate matter is considered over a 70-year exposure time. Additionally, the nearest sensitive receptors (residences) would be located approximately 2,600 feet from the Project site. Diesel particulate matter filters would reduce diesel emissions; however, they are costly and are not required since the sensitive receptors are so far from the source. The concentration of diesel particulate matter in the air will disperse over time and distance. Therefore, considering the dispersion of the emissions and the short time frame, exposure to diesel particulate matter is anticipated to be less than significant.

There could be an emergency generator onsite that would emit diesel particulate matter during power outages. However, this would not occur frequently and is more than 2,600 feet from the nearest sensitive receptor. Use of propane fuel instead of diesel or the installation of diesel particulate matter filters would reduce diesel emissions; however, considering the distance to the nearest sensitive receptor and the infrequent nature of operation, those amendments are not required. Impacts are less than significant.

Impact Conclusion: Project impacts related to exposing sensitive receptors to substantial pollutant concentrations would be less significant.

e) Create objectionable odors affecting a substantial number of people?

Odors can cause a variety of responses. The impact of an odor results from interacting factors such as frequency (how often), intensity (strength), duration (in time), offensiveness (unpleasantness), location, and sensory perception. Odor is typically a warning system that prevents animals and humans from consuming spoiled food or toxic materials. Odor-related symptoms reported in a number of studies include nervousness, headache, sleeplessness, fatigue, dizziness, nausea, loss of appetite, stomach ache, sinus congestion, eye irritation, nose irritation, runny nose, sore throat, cough, and asthma exacerbation (South Coast Air Quality Management District 2007).

The SCAQMD's role is to protect the public's health from air pollution by overseeing and enforcing regulations (South Coast Air Quality Management District 2007). The SCAQMD's resolution activity for odor compliance is mandated under California Health & Safety Code Section 41700, and falls under SCAQMD Rule 402. This rule on Public Nuisance Regulation states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The

provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.”

The SCAQMD recommends that odor impacts be addressed in a qualitative manner. Such an analysis shall determine whether the Project would result in excessive nuisance odors, as defined under the California Code of Regulations and Section 41700 of the California Health and Safety Code, and thus would constitute a public nuisance related to air quality.

Land uses typically considered associated with odors include wastewater treatment facilities, waste-disposal facilities, or agricultural operations. The Project does not contain land uses typically associated with emitting objectionable odors. Diesel exhaust and VOCs would be emitted during construction of the Project, which are objectionable to some; however, emissions would disperse rapidly from the Project site and therefore should not reach an objectionable level at the nearest sensitive receptors.

Impact Conclusion: Project impacts related to creation of objectionable odors would be less than significant.

Section 3 References

Michael Brandman Associates. Air Quality and Greenhouse Gas Background Information and Model Output, Oak Flat Radio Tower Project. May 3, 2011.

4. Biological Resources

Would the project:

- a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

An onsite pedestrian survey and subsequent Biological Resources Impact Analysis (Michael Brandman Associates, 2010) prepared for the Project (Appendix B) concluded that the Project site lacks suitable habitat for any sensitive plant or wildlife species. No sensitive plant or wildlife species have a moderate to high potential to occur onsite and focused surveys were not recommended.

Impact Conclusion: The Project's impacts on candidate, sensitive, or special status species would be less than significant.

- b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

The Project site and immediate vicinity contain plant species commonly found in an upland, disturbed, non-native grassland, chaparral, and woodland habitats. No riparian or other sensitive natural community is present on or adjacent to the site as determined by the Biological Resources Impact Analysis prepared by Michael Brandman Associates, 2010.

Impact Conclusion: No impacts would occur to riparian habitat or sensitive natural communities from Project implementation.

- c) **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

The Project site and immediate vicinity contain plant species commonly found in an upland, disturbed, non-native grassland, chaparral, and woodland habitats. The Biological Resources Impact Analysis prepared by Michael Brandman Associates, 2010 determined that no hydrophytic plant species were observed on the site; therefore, it was not necessary to examine the other two wetland criteria (hydrology and soils), since all three criteria must be met where wetlands are present. No jurisdictional wetlands are present on the Project site.

Impact Conclusion: Impacts related to wetland impacts would not occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

The proposed Project does not include any structures or other components that would interfere with the movement of any fish or wildlife species or with established wildlife corridors. The non-native grassland, disturbed areas, chaparral, and oak woodland habitats on and in the vicinity of the project site provide suitable nesting habitat for several avian species such as California towhee and Bewick's wren, although the highly disturbed condition of the Project site relative to the surrounding areas represents less suitable habitat. Once operational, the very small footprint of the improvements, estimated at 0.22 percent of the entire site, would allow for unimpeded movement of terrestrial wildlife species across the site. The project site is not identified as a regional migratory bird corridor. The 27.60-acre site relative to the entire Santa Mountains, approximately 36 miles in length, would not result in changes to migratory bird patterns. Moreover, the towers themselves would be used by raptors as perching locations. Therefore, continued use of the site as a communication facility would not interfere with migratory bird patterns. Furthermore, the Project does not include any elements that would impede the use of native wildlife nursery sites as determined by the Biological Resources Impact Analysis prepared by Michael Brandman Associates, 2010.

Mitigation Measures

MM BIO-1 Prior to the issuance of a grading permit, the project applicant shall provide proof of the means for the implementation of mitigation to reduce impacts to migratory and/or nesting bird species to below a level of significance through one of two ways. Vegetation removal activities will be scheduled outside the nesting season (August 16 to February 14) to avoid potential impacts to nesting birds. This will insure that no active nests will be disturbed and that habitat removal could proceed rapidly. Any construction activities that occur during the nesting season (February 15 to August 15) will require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 100 feet (300 feet for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.

Impact Conclusion: Project implementation would not interfere with wildlife movement and less than significant impacts would result with implementation of the recommended mitigation measure.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The proposed Project would not conflict with any local policies or ordinances protecting biological resources, including the goals and policies found within the County of Orange General Plan and the

Orange County Natural Community Conservation Plan/Habitat Conservation Plan (Orange County NCCP/HCP) as determined by the Biological Resources Impact Analysis prepared by Michael Brandman Associates, 2010.

Impact Conclusion: Therefore, no impacts to conflicts with biological-resource-related policies or ordinances would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Project site is located within the boundaries of the Orange County Central and Coastal NCCP/HCP; however, the site is not located within the Reserve System and is classified as a Non-Reserve Open Space Area within the Cleveland National Forest area. No Project elements are anticipated to result in the loss of native or suitable habitat for any sensitive plant or wildlife species, and no impacts to covered species would occur and potential impacts related to conflicting with an adopted Conservation Plan/Habitat Conservation Plan would not occur.

Impact Conclusion: Therefore, potential impacts related to an adopted Conservation Plan/Habitat Conservation Plan would be less than significant.

Section 4 References

Michael Brandman Associates. Biological Resources Impact Analysis. September 10, 2010.

Tommy Molioo, Personal communication. Michael Brandman Associates. June 20, 2011.

5. Cultural Resources

Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?**

A records search concluded that no National Register eligible or other listed historic resources occur within 0.75 mile of the Project site. The only structures that occur in the Project area consist of one abandoned single-story structure and 20 untreated wood radio towers; because of their age, condition, and general characteristics, none of these structures would be considered a historical resource. Additionally, an onsite pedestrian survey conducted by Michael Brandman Associates, 2010 (Appendix C) supported these findings, determining that the Project would not cause a substantial adverse change in the significance of a historic resource.

Impact Conclusion: No impacts to historical resources would result from Project implementation.

- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?**

Results of a records search and an onsite pedestrian survey by Michael Brandman Associates (Appendix C) indicated that no known archaeological resources occur within 0.75 mile of the Project site. The site has been previously graded and otherwise disturbed, reducing the probability of encountering an archaeological resource during Project development. Construction of the Project, however, would include trenching and other similar excavation activities, and thus, creating the possibility that an archaeological resource would be encountered.

Mitigation Measures

- MM CR-1** Prior to the issuance of a grading permit Project-related archaeological monitoring shall be conducted and include the following: a) In the event that an archeological resource is encountered during construction of the Project, work near the find should be diverted and a qualified archaeologist should be immediately notified. The archaeologist will assess the find and provide mitigation recommendations. b) If buried archaeological resources are detected during monitoring, monitoring must continue until 100 percent of virgin earth within the study area has been disturbed and inspected by the Project Archaeologist or their designated representative. c) If cultural resources are uncovered, earthmoving shall cease in the area of a cultural artifact or potentially significant cultural site as delineated by the Project Archaeologist or their designated representative. Earthmoving can continue in other areas of the Project site while the uncovered finds are investigated by the archaeologist. d) If cultural resources are uncovered, they shall be examined by a professional archaeologist subject to Mitigation Measure CR-2, and then curated in a

museum facility. A mitigation monitoring report must accompany the artifacts once they are donated to the museum facility.

- MM CR-2** Should buried archaeological cultural resources be encountered during monitoring, the resources shall be Phase-II tested and evaluated for significance following CEQA Guidelines prior to continuance of grading in the area.

Impact Conclusion: With the implementation of the recommendation mitigation measures, Project impacts related to impacting an archaeological resource would be reduced to less than significant levels.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

A records search conducted by the Los Angeles County Natural History Museum (Appendix D) (Rhue 2011) concluded that no known vertebrate fossil localities occur directly within the Project boundaries. The same search, however, indicated that vertebrate fossil localities have been discovered within the same sedimentary deposits within the Project area. Bedrock exposures in the area consist of the Holtz Shale Member of the Upper Cretaceous Ladd Formation, and few vertebrate fossils are commonly encountered from the Ladd Formation; however, even shallow excavations in the Ladd Formation have the potential to expose significant vertebrate fossils.

Mitigation Measures

- MM CR-3** Prior to issuance of a grading permit during all ground-disturbing activities at or below a depth of four feet from the ground surface, a qualified paleontologist shall monitor excavation activities. The paleontologic monitor shall be equipped to salvage fossils as they are unearthed to avoid construction delays, and to remove samples of sediments likely to contain the remains of small fossil invertebrates and vertebrates. The monitor shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens.
- MM CR-4** In the event that paleontological resources are encountered, a qualified paleontologist shall ensure the preparation of recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. The paleontologist shall ensure that the specimens are properly identified and curated with an established, accredited museum repository with permanent retrievable paleontologic storage. The paleontologist shall provide a report of findings with an appended itemized inventory of specimens to the Project Engineer.

Impact Conclusion: With the implementation of the recommendation mitigation measures, Project impacts related to destruction of a paleontological resource would be reduced to less than significant levels.

d) Disturb any human remains, including those interred outside of formal cemeteries?

A records search and onsite pedestrian survey concluded that no known human remains occur on the Project site. Construction of the Project, however, would include trenching and other similar excavation activities that could uncover previously unknown human remains.

Mitigation Measures

MM CR-5 Prior to issuance of a grading permit, if human remains are unexpectedly encountered during excavations associated with the Project, all work will halt, and the County Coroner will be notified (Section 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are of forensic interest. If the Coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, then Mitigation Measure CR-4 will be implemented. If the remains are determined to be prehistoric, the Native American Heritage Commission (NAHC) will be contacted. The NAHC will be responsible for designating the most likely descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by Section 7050.5 of the California Health and Safety Code. The MLD will make their recommendations within 24 hours of their notification by the NAHC. This recommendation may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (Section 7050.5 of the Health and Safety Code).

Impact Conclusion: With the implementation of the recommendation mitigation measures, Project impacts related to the unexpected discovery of human remains would be reduced to less than significant levels.

Section 5 References

Michael Brandman Associates. Cultural Resources Letter Report. March 16, 2010.

Rhue, Vanessa R. Paleontological Resources Letter Report. April 7, 2011.

6. Geology and Soils

Would the project:

- a) **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:**
- i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

According to the Soils Report prepared by US Soils (March 22, 2011) for the proposed Project (Appendix E) no known active faults occur through the Project site. The site is not in an Alquist-Priolo zone as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, nor does the USGS 2006-1217 Sheet 2 delineate faults occurring on or adjacent to the site. Uniform Building Code (UBC) Earthquake Hazard maps delineate the site as being within 2 km (1.24 miles) of the Chino-Central Avenue Fault and the Whittier Fault, both type B faults. Seismic activity along these faults would not result in onsite surface rupture.

Impact Conclusion: The proposed structures or onsite workers would not be exposed to rupture of a known earthquake fault and less than significant impacts resulting earthquake fault rupture would result from Project implementation.

ii) **Strong seismic ground shaking?**

The proximity of the area faults does indicate that strong seismic ground motion is likely during the life of the Project. Uniform Building Code (UBC) Earthquake Hazard maps delineate the Project site as being within 2 km (1.24 miles) of the Chino-Central Avenue Fault and the Whittier Fault, both type B faults. Project design features such as concrete drilled piers and dead man anchors would ensure that onsite structures could withstand strong seismic ground shaking and retain their structural integrity while reducing risk of loss. No residential structures are proposed and no people would reside onsite, further reducing the risk of injury or death. Maintenance personnel would periodically visit the site to perform routine maintenance activities, although any risk of injury or death would be reduced by the aforementioned design features.

Impact Conclusion: The proposed structures or onsite workers would not be exposed to substantial adverse effects from strong seismic ground shaking and less than significant impacts would result from Project implementation.

iii) Seismic-related ground failure, including liquefaction?

The Soils Report prepared for the Project site concluded that liquefaction and other seismic-related ground failure is not likely to occur. A review of Californian Geological Survey Seismic (CGS) Hazard Maps showed that the site is not within delineated liquefaction hazard zones. Although there are no known active faults through the site, the proximity of the area faults does indicate that strong seismic ground motion is likely during the life of the Project; however, design features, including drilled piers and anchors, would reduce both the effects of seismic-related ground failure upon onsite structures and the risk of loss, injury, or death as a result.

Impact Conclusion: Less than significant impacts from seismic-related ground failure, including liquefaction, would result from Project implementation.

iv) Landslides?

The Project site occurs on a gently sloping, previously graded parcel surrounded by moderately sloping natural terrain. No steep slopes are present on or adjacent to the site. The site is not within the delineated slope hazard zones of the CGS Seismic Hazards Maps. According to the Soils Report, top soils in the Project area may be creeping, subsurface soils and materials are relatively stable. Overall, due to onsite topographical characteristics, loss, injury, or death as a result of landslides is unlikely.

Impact Conclusion: Less than significant impacts to structures or onsite from workers from landslides would result from Project implementation.

b) Result in substantial soil erosion or the loss of topsoil?

Construction-related activities could potentially encourage soil erosion or the loss of topsoil. Much like similar construction projects that disturb one or more acres, the proposed Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) and develop a Stormwater Pollution Prevention Plan (SWPPP), which includes development and implementation of Best Management Plans (BMPs). These BMPs will include erosion control and abatement measures. Additionally, the majority of required grading was previously performed by the former owner, reducing the amount of erosion-promoting activities that would occur onsite.

Operational-related activities, including routine maintenance of the proposed radio towers, are not anticipated to result in substantial erosion or the loss of topsoil.

Impact Conclusion: With the implementation of the mandatory SWPPP, impacts from soil erosion would be less than significant.

- c) **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

The Soil Report concluded that onsite geological materials are generally stable, although top soils in the valley may be creeping. The report determined that non-structural elements not drilled pier supported and placed at locations other than the mound pads may have large movements over time; however, design features incorporated into construction of the proposed radio towers incorporating the recommendations in the Soils Report as a recommended mitigation measure, including drilled pier and anchors, would eliminate any impacts from any potential geologic instability.

Mitigation Measures

- MM GEO-1** Prior to issuance of the first grading plans or issuance of the first grading permit, the Project applicant shall incorporate the recommendations provided in the Soils Report prepared for the Project by US Soils.

Impact Conclusion: With the implementation of recommended Mitigation Measure GEO-1, less than significant impacts would result to unstable geologic units and soils from Project implementation.

- d) **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

The Soils Report determined that significant desiccation is not present, and that observed materials are not of high plasticity or activity. These observations indicate a lack of expansive soils.

Impact Conclusion: No impacts related to expansive soils would result from Project implementation.

- e) **Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

The use of septic tanks or alternative wastewater disposal systems are not proposed as part of the Project.

Impact Conclusion: No impacts related to soil inadequacy for wastewater systems would result from Project implementation.

Section 6 References

Hartsog, Charles H. Soils Report. March 22, 2011.

7. Greenhouse Gas Emissions

Would the project:

- a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Threshold and Methodology

On December 5, 2008, the SCAQMD Governing Board adopted an interim greenhouse gas significance threshold for stationary sources, rules, and plans where the SCAQMD is lead agency (“SCAQMD permit threshold”). The SCAQMD permit threshold consists of five tiers, as follows:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether or not the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 is a screening threshold of 10,000 MTCO₂e per year.
- Tier 4 was not approved in the interim greenhouse gas threshold.
- Tier 5 would allow the project proponent to purchase offsite mitigation to reduce greenhouse gas emissions to less than the screening level (in Tier 3).

The SCAQMD is in the process of preparing recommended significance thresholds for greenhouse gases for local lead agency consideration (“SCAQMD draft local agency threshold”); however, the SCAQMD Board has not approved the thresholds as of the date of the NOP for local lead agencies to utilize in assessing impacts. The current draft thresholds consist of the following tiered approach.

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 consists of screening values, which the lead agency can choose but must be consistent with the approach. A project’s construction emissions are averaged over 30 years and are added to a project’s operational emissions. If a project’s emissions are under one of the following screening thresholds, then the project is less than significant:
 - All land use types: 3,000 MTCO₂e per year

- Based on land use type: Residential: 3,500 MTCO₂e per year; Commercial: 1,400 MTCO₂e per year; or Mixed use: 3,000 MTCO₂e per year
- Tier 4 has the following options:
 - Reduce emissions from business as usual by a certain percentage
 - Early implementation of applicable AB 32 Scoping Plan measures
 - 2020 efficiency target: 4.8 MTCO₂e/SP/year for projects and 6.6 MTCO₂e/SP/year for plans
 - 2035 target: 3.0 MTCO₂e/SP/year for projects and 4.1 MTCO₂e/SP/year for plans
- Tier 5 involves mitigation offsets to achieve target significance threshold.

To determine whether the Project is significant, this Project utilizes the SCAQMD draft local agency threshold. The Project does not meet tier 1 or 2, since the Project is not exempt from CEQA and there is no applicable greenhouse gas reduction plan. Therefore, tier 3 is used to determine significance. The Project does not directly fit into one of the categories. Therefore, the lowest threshold of 1,400 MTCO₂e is used for this Project. The SCAQMD recommends adding the construction emissions (averaged over 30 years) to the operational emissions to derive total Project emissions and comparing the threshold to the total.

The Project would emit greenhouse gases from upstream emission sources (emissions generated during the manufacture and transportation of products) and direct sources (combustion of fuels from worker vehicles and construction equipment). Upstream emission sources for the Project include the paving and granite materials, and the materials to construct the facilities at the Auto Center Drive location. The upstream emissions were not estimated because they are not within the control of the Project and to do so would be speculative at this time. Additionally, the California Air Pollution Control Officers Association White Paper on CEQA and Climate Change supports this conclusion by stating, “The full life-cycle of GHG [greenhouse gas] emissions from construction activities is not accounted for . . . and the information needed to characterize [life-cycle emissions] would be speculative at the CEQA analysis level.” Therefore, pursuant to CEQA Guidelines Sections 15144 and 15145, upstream /life cycle emissions are speculative and no further discussion is necessary.

This analysis is restricted to greenhouse gases identified by AB 32, which include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The Project would generate a variety of greenhouse gases during construction and operation, including several defined by AB 32 such as carbon dioxide, methane, and nitrous oxide.

The Project may also emit greenhouse gases that are not defined by AB 32. For example, the Project may generate aerosols. Aerosols are short-lived particles, as they remain in the atmosphere for about one week. Black carbon is a component of aerosol. Studies have indicated that black carbon has a high global warming potential; however, the Intergovernmental Panel on Climate Change states that it has a low level of scientific certainty (Intergovernmental Panel on Climate Change 2007a). Water vapor could be emitted from evaporated water used for landscaping, but this is not a significant

impact because water vapor concentrations in the upper atmosphere are primarily due to climate feedbacks rather than emissions from Project-related activities. The Project would emit nitrogen oxides and volatile organic compounds, which are ozone precursors. Ozone is a greenhouse gas; however, unlike the other greenhouse gases, ozone in the troposphere is relatively short-lived and can be reduced in the troposphere on a daily basis. Stratospheric ozone can be reduced through reactions with other pollutants.

Certain greenhouse gases defined by AB 32 would not be emitted by the Project. Perfluorocarbons and sulfur hexafluoride are typically used in industrial applications, none of which would be used by the Project. Therefore, it is not anticipated that the Project would emit perfluorocarbons or sulfur hexafluoride.

An inventory of greenhouse gas emissions generated by the Project is presented below. The emissions are converted to metric tons of carbon equivalents (MTCO₂e) using the formula:

$$\text{MTCO}_2\text{e} = (\text{tons of gas}) \times (\text{global warming potential}) \times (0.9072 \text{ metric tons of gas})$$

Inventory

Greenhouse gas emissions from Project construction equipment and worker vehicles are shown in Table 7. Methane and nitrous oxide emissions are negligible. The emissions are from all phases of construction. The SCAQMD's draft tiered threshold applies to operational emissions plus the construction emissions averaged over 30 years. Therefore, please refer to Table 8 for a discussion of the emissions compared with the draft threshold of significance.

Table 7: Construction Greenhouse Gas Emissions

Phase	Carbon Dioxide (tons)	Total (MTCO ₂ e)
Offsite haul trucks (6 per day)	10	9
Offsite worker (5 per day)	42	38
Demolition	1	1
Clearing and grubbing	2	2
Excavation, trenching, onsite dirt road repair	17	15
Foundation installation	1	1
Tower erecting, ground radial installation, prefab placement, walls/fences	9	8
Total	82	74
Averaged over 30 years	2	2
Note: MTCO ₂ e = metric tons of carbon dioxide equivalents (carbon dioxide in tons multiplied by 0.9072). Source: Appendix A.		

Operational or long-term emissions occur over the life of the Project. Motor vehicle emissions refer to greenhouse gas emissions contained in the exhaust from the trucks that would travel to and from the Project site. Emissions would be generated by offsite power plants to supply the electricity required for the Project. Electricity would be used to power the air conditioning unit in the onsite building and power the transmission. Refrigerants could be released during operation of the air conditioning unit.

The operational emissions for the Project are shown in Table 8. The construction emissions averaged over 30 years are added to the operational emissions to derive the total emissions. As shown in the table, the total emissions (operation plus construction averaged over 30 years) are under the SCAQMD draft significance threshold. Therefore, emissions are less than significant.

Table 8: Project Greenhouse Gas Emissions

Source	Emissions (MTCO ₂ e per year)
Worker vehicles	9
Emergency generator	1
Electricity	233
Refrigerants	72
<i>Subtotal operational</i>	<i>315</i>
<i>Construction averaged 30 years</i>	<i>2</i>
Total	317
SCAQMD Draft Threshold for Commercial Projects	1,400
Significant Impact?	No
Note: MTCO ₂ e = metric tons of carbon dioxide equivalents (includes carbon dioxide, methane, and nitrous oxide). NG = negligible. Source: Michael Brandman Associates, 2011 (Appendix A)	

Impact Conclusion: Project impacts related to either the direct or indirect generation of greenhouse gas emissions is less than significant.

b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

The County of Orange and the SCAQMD do not have a plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases.

Emission reductions in California alone would not be able to stabilize the concentration of greenhouse gases in the earth's atmosphere. However, California's actions set an example and drive progress towards a reduction in greenhouse gases elsewhere. If other states and countries were to

follow California's emission reduction targets, this could avoid medium or higher ranges of global temperature increases. Thus, severe consequences of climate change could also be avoided.

The ARB Board approved a Climate Change Scoping Plan in December 2008. The Scoping Plan outlines the State's strategy to achieve the 2020 greenhouse gas emissions limit. Project consistency with applicable strategies in the Scoping Plan is assessed in Table 9. The strategies that are not applicable to the Project are shown in Appendix A. As shown, the Project is consistent with the applicable strategies with mitigation.

Table 9: Consistency with Applicable Scoping Plan Reduction Measures

Scoping Plan Reduction Measure	Project Consistency
3. Energy Efficiency. Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms.	Consistent with mitigation.
9. Million Solar Roofs Program. Install 3,000 MW of solar-electric capacity under California's existing solar programs.	Consistent with mitigation.
13. Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	Consistent with mitigation.
15. Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling.	Consistent with mitigation.
Source of ARB Scoping Plan Reduction Measure: California Air Resources Board 2008. Source of Project Consistency or Applicability: Michael Brandman Associates.	

Mitigation Measure

MM GHG-1 Prior to issuance of a building permit, the Project applicant shall provide proof to the Manager, Permit Services that the following measures are part of the Project:

- If the Project is planning on purchasing a new prefab/modular structure for use onsite, the structure shall be as energy efficient as possible.
- The Project shall incorporate at least one solar panel in its design.
- During construction, the Project shall reuse or recycle at least 50 percent of the waste generated.

Impact Conclusion: With implementation of MM GHG-1, Project impacts related to an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases would be less than significant.

Section 7 References

Michael Brandman Associates. Air Quality and Greenhouse Gas Background Information and Model Output, Oak Flat Radio Tower Project. May 3, 2011.

8. Hazards and Hazardous Materials

Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Hazardous materials exhibit one or more of the following characteristics: ignitable, corrosive, explosive, or toxic to living organisms. Hazardous materials are categorized as federally listed wastes or California listed wastes. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment. The probable frequency and severity of consequences from the use, transport, or disposal of hazardous materials is affected by the type of substance, quantity used or managed, and the nature of the activities and operations.

The proposed Project is not a business that would generate hazardous wastes and, therefore, would not be classified as a hazardous waste generator. Small amounts of materials typically considered household hazardous waste (cleaning solvents, etc.) would be used during the construction phase and operational phase, which are considered Universal Waste. The California Department of Toxic Substances Control allows Conditionally Exempt Small Quantity Generators and the public to transport Universal Waste to a hazardous waste recycling facility.

Universal Waste would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with the regulations of the Orange County Health Division. Any associated risk would be adequately reduced to a less than significant level through mandatory compliance with the handling and transfer to a recycling facility. Thus, potential impacts from the routine transport, use or disposal of hazardous materials resulting from the proposed project are less than significant.

Impact Conclusion: Impacts related to the routine transport and use of hazardous materials would be less than significant from Project implementation.

- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

The proposed Project would not produce hazardous emissions or handle acutely hazardous materials, substances, or waste. Short-term construction activities would handle potentially hazardous materials associated with construction equipments and vehicle such as diesel fuel and petroleum-based products. Long-term operation activities would involve the use of potentially hazardous materials (e.g., solvents, cleaning agents, paints, pesticides) typical of similar facilities that, when used correctly, would not result in a significant hazard to those in the vicinity of the Project (Refer to 8a above).

Impact Conclusion: With the mandatory obligation related to transport and use of materials, less than significant impacts would result from Project implementation.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No existing or proposed schools occur within 0.25 mile of the Project site. The nearest schools to the site are Dwight D. Eisenhower, Benjamin Franklin, and John Adams Elementary Schools, all located approximately 4 miles east-northeast in the City of Corona.

Impact Conclusion: No hazardous waste impacts to schools would result from Project implementation.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The Phase I Environmental Site Assessment (ESA) prepared by Michael Brandman Associates (May 6, 2011 and revised May 14, 2011) for the proposed Project (Appendix F) concluded that the Project site is on a list of hazardous materials sites related to underground storage tanks and orphan sites associated with the previous use of the site. Based on a site reconnaissance and a review of physiographic, historical, and regulatory information, there is evidence of recognized environmental conditions (RECs) (as defined by ASTM standards) in connection with the property and the proposed northwestern antenna location. This is based on 1), the presence of surface staining located on the interior slab of the onsite building, 2), the condition of the pole mounted transformer located on the northwestern portion of the Property, 3), the recommendation for testing identified in the previous report performed for the Property, 4) the identification of buried transformers in the previous report, and 5) the identification in the previous report of a former AST, and the lack of documentation on the AST by local and government agencies. In addition, as the onsite building was constructed between 1971 and 1976, and if the structure is to be disturbed, MBA recommends testing the building for lead based paint and asbestos containing materials, prior to any disturbance of the building and proper disposal of the stained concrete slab. Therefore, further investigation is recommended at this time. The site also contains untreated wood radio tower poles from the former amateur radio station. These poles are not considered hazardous materials when specified disposal requirements are met.

Mitigation Measures

MM HAZ-1 Prior to issuance of a demolition permit of the buildings, an asbestos survey shall be conducted and any suspicious materials shall be disposed of in accordance with published agency requirements. The project applicant or demolition contractor shall provide written notification to the South Coast Air Quality Management District and to the County designee five business days in advance of demolition activities. The demolition contractor shall determine the percent of ACMs in the volume of the

material to be disposed. If the volume of ACMs exceeds 1.0 percent, the material shall be taken to a landfill permitted to accept these materials. If the volume of ACMs is less than 0.99 percent, the material shall be taken to a permitted Class III landfill. Written records of the survey and disposal, if any, shall be provided to the County designee within five business days after completion of the survey and five business days after completion of the disposal, respectively.

MM HAZ-2 Prior to issuance of demolition permit of the buildings, a lead based paint survey shall be conducted and any suspicious materials shall be disposed of in accordance with published agency requirements. The project applicant or demolition contractor shall provide written notification to the South Coast Air Quality Management District and to the County designee five business days in advance of demolition activities. The demolition contractor shall determine the percent of ACMs in the volume of the material to be disposed. If the volume of ACMs exceeds 1.0 percent, the material shall be taken to a landfill permitted to accept these materials. If the volume of ACMs is less than 0.99 percent, the material shall be taken to a permitted Class III landfill. Written records of the survey and disposal, if any, shall be provided to the County designee within five business days after completion of the survey and five business days after completion of the disposal, respectively.

Impact Conclusion: With the implementation of the recommended mitigation measures potential impacts associated with ACMs and LBPs would be less than significant,

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The Project site is not located within an airport land use plan or within two miles of a public airport. The nearest airport to the site is Corona Municipal Airport located approximately 5 miles northeast of the Project site.

Impact Conclusion: No airport-related safety hazards would result from implementing the Project.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The Project site is not located within the vicinity of a private airstrip. There are no private airstrips located within 10 miles of the Project site.

Impact Conclusion: No private airstrip airport-related safety hazards would result from implementing the Project.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Project site is not located in an area with an adopted emergency response plan or evacuation plan. Project development would not impair implementation of or physically interfere with any such plans.

Impact Conclusion: No impacts to emergency response plans would result from Project implementation.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The proposed Project involves construction of four radio towers and associated buildings, as well as the removal of approximately 20 existing towers and one existing, non-residential building. The Project does not propose nor is it equipped for habitation and would not introduce activities known to increase risk of wildland fire. The County of Orange General Plan identified the Project site as being in a Very High Fire Hazard Severity Zone; however, the site is not located in an area adjacent to urbanized areas or residential uses. Additionally, the Project would comply with all County regulations regarding wildland fire prevention such as brush clearance standards in Section 3-3-1 of the Orange County Code of Ordinances, which would further reduce the risk of wildland fire.

The self-contained, trailer-mounted portable generator that would be provided in the event a long-term power outage would be located within CMU generator enclosure in the equipment building. The power generator contains an internal fuel tank; no external fuel tank is required and no fuel would be stored onsite. Therefore, no impacts to wildland fires would result from permanent onsite fuel storage.

Impact Conclusion: Project implementation does not have the potential to expose persons or structures to significant risk from wildland fire hazard with the mandatory brush clearance provisions.

i) Include a new or retrofitted storm water treatment control Best Management Practice (BMP), (e.g. water quality treatment basin, constructed wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors and odors)?

The proposed Project does not include a new or retrofitted stormwater treatment control Best Management Practice. Additionally, the Project would be required to comply with the mandatory obligations related to stormwater contained in the County's standard conditions.

Impact Conclusion: No impacts related to storm water BMPs would result.

j) Expose people to risk from transmitting tower failure?

In addition to the Impact Questions 8a through 8i, Orange County in its capacity as Lead Agency included the following evaluation related to transmitting tower failure including wind load calculations and fall zone.

The proposed radio transmitting towers were designed in accordance with Telecom Industry Association (TIA) standard TIA-222-G, which is the industry standard for radio broadcast transmitting towers. The TIA standard is based on a concept known as “strength limit states,” which provides design guidelines that when followed confirm structures are safe under extreme loading conditions.

The strength limit state includes environmental loads considerations, including topography, wind loads, ice loads, and earthquake loads. The towers were designed specifically for the site topography and are capable of withstanding a Basic Wind calculated at 85 miles per hour. The tower base and guy wire foundations will comply with the mandatory provisions of the California Building Code. Ice loads were determined not to be applicable because of the regional location.

Based on the TIA standards, the towers are rated at 84 percent. This rating means that the towers would be stressed at only 84 percent of their maximum design capacity, which is well within the margin of safety.

The fall zone of the towers is estimated at approximately 150 feet or approximately 50 percent of the tower height. Based on this, the fall zone would not extend off the Project site boundary.

Impact Conclusion: Less than significant impacts related to hazards from tower failure due to excessive wind loading or tower failure would result from Project implementation.

k) Expose people to elevated electromagnetic fields in excess of adopted guidelines?

In addition to Impact Questions 8a through 8i, Orange County in its capacity as Lead Agency included the following evaluation related to electromagnetic fields.

Elevated electromagnetic fields from the towers will be limited to the area within the perimeter fencing at each tower base. A Federal Communications Commission Antenna Structure Registration Number will be placed at the base of each tower. In addition, signage will be placed on the perimeter fencing of each tower indicating that elevated levels of RF radiation may exist within the fenced area. The 20-foot-radius perimeter fencing provides an adequate buffer against inadvertent public contact with electromagnetic fields in excess of the general population/uncontrolled Maximum Permissible Exposure (MPE) levels. The MPE levels are specified in *Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz*, Report C95.1-1992 published by the American National Standards Institute and Institute of Electronics and Electrical

Engineers. In addition, the safety levels identified in Report C95.1-1992 are codified in the Code of Federal Regulations (47 C.F.R. §1.1310) and the Federal Communications Commission, Office of Engineering and Technology Bulletin No. 65, *Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields (OET-65)*.

Impact Conclusion: Less than significant impacts related to health hazards from exposure to electromagnetic fields would result from Project implementation.

Section 8 References

Airnav.com website

Michael Brandman Associates, Phase I Environmental Site Assessment, May 6, 2011 and Revised May 14, 2011.

Orange, County of. General Plan. December 9, 2008.

Orange, County of. Health Care Agency, Environmental Health Division. Hazardous Waste: The Basics.

Larry Paxton. Personal communication. Paul J Ford and Company. June 21, 2011.

Ray Grage. Personal communication. Ray Grage Associates. June 13, 2011.

W.C. Alexander. Written communication. Crawford Broadcasting Company. June 15, 2011.

9. Hydrology and Water Quality

Would the project:

a) Violate any water quality standards or waste discharge requirements?

The proposed Project would be required to comply with the following:

- State Water Resources Control Board Order No. 99-08-DWQ
- NPDES Permit No. CAS000002
- State Water Resources Control Board Resolution No. 2001-046

Mandatory preparation of a SWPPP would address the construction impacts during the short-term construction phase. The purpose of a SWPPP is to:

- Identify potential pollutant sources that may affect the quality of discharges associated with construction activities,
- Identify non-stormwater discharges,
- Design the use and placement of BMPs to effectively prohibit the entry of pollutants from the construction site into a storm drain during construction,
- Consider sediment and erosion control BMPs for both active and inactive (previously disturbed) construction areas, and
- Consider BMPs for wind erosion and dust control.

The site had been previously graded from the previous amateur and commercial radio installations to provide onsite access roads and building pads. Therefore, grading for the proposed Project is limited to building pads for the equipment building, radio towers, and minor regarding of the existing access roads.

In addition to the preparation of a SWPPP, a Non-Priority Water Quality Management Plan (WQMP) would be prepared to include source control non-structural and routine structural BMPs. Non-structural BMPs (i.e., non-physical improvements) generally include education, activity restrictions, BMP maintenance, litter control, employee training, etc. Routine structural BMPs generally include the design and construction of material storage areas, trash enclosure areas, use of efficient landscape and irrigation systems, erosion control, etc.

Operational-related activities, including routine maintenance of the proposed radio towers, would not result in substantial water quality impacts. Stormwater runoff from the impervious surfaces at the tower bases and transmission equipment structure would be contained within the concrete masonry unit (CMU) walls, allowing the water to percolate into the soil within the enclosed areas.

The portable emergency generator is self-contained and trailer-mounted that would be used only in the event of a long-term power outage lasting several days or longer. The equipment building includes a space for the generator within the CMU walls. The power generator contains an internal fuel tank; no external fuel tank is required and no fuel would be stored onsite. The WQMP would include BMP No. 7 (also identified as BMP No. SC-11 by the California Stormwater Quality Association BMP Handbook). Inclusion of this particular BMP in the WQMP would eliminate the already unlikely possibility of fuel spill to be discharged outside the CMU walls.

Impact Conclusion: Mandatory compliance with the provisions of the provisions of the State Water Resources Control Board and NPDES by preparing a SWPPP and WQMP would not violate any water quality standards or waste discharge requirements and therefore result in less than significant impacts.

- b) Substantially alter drainage patterns of the site or area including the alteration of the course of a stream or river, in manner which would result in:**
 - i. substantial erosion or siltation on- or offsite**
 - ii. a substantial increase in the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?**

The site had been previously graded from the previous amateur and commercial radio installations to provide onsite access roads and building pads. Therefore, grading for the proposed Project is limited to building pads for the equipment building, radio towers, and minor regarding of the existing access roads. Stormwater runoff from the impervious surfaces at the tower bases and transmission equipment structure would be contained within the CMU walls, allowing the water to percolate into the soil within the enclosed areas. Stormwater would not be discharged offsite and the existing site drainage pattern would not be altered. The proposed Project would disturb more than one acre and therefore be required to comply with the NPDES and develop a SWPPP, which includes development and implementation of Best Management Plans (BMPs). These BMPs will include erosion control and abatement measures, as well as measures to prevent onsite pollutants and waste from being conveyed offsite during the short-term construction phase (refer to the discussion under “a)” above). Similarly, a WQMP would be prepared and implemented for the long-term operational phase of the project that would include BMPs for erosion and siltation (refer to the discussion under “a)” above).

Impact Conclusion: The overall existing contours of the site would be maintained thereby retaining the existing site drainage patterns. Impacts would be less than significant related to substantial on- and offsite erosion and the potential for on- or offsite flooding with the preparation of the mandatory SWPPP and WQMP.

ii. A substantial increase in the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Stormwater runoff from the impervious surfaces at the tower bases and transmission equipment structure would be contained within the CMU walls, allowing the water to percolate into the soil within the enclosed areas and not be discharged. Minimal grading of existing onsite access roads would occur. An increase in the amount and rate and volume of surface runoff would not increase over existing levels.

Impact Conclusion: Project implementation would not increase the rate or amount of surface runoff resulting in less than significant impacts.

c) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

The Biological Resources Impact Analysis prepared for the Project by Michael Brandman Associates (Appendix B) concluded that no streams or rivers (i.e., jurisdictional areas) are located on the Project site; therefore, no impacts related to a stream or river would occur. The Project would remove the existing 1,200-square-foot building and radio towers associated with the former amateur radio station and replace them with the proposed 1,600-square-foot equipment building and four radio towers. In addition, the existing onsite access roads would be minimally regraded in their existing location. The former radio tower poles would be filled-in and recompact (Photograph 5 on Exhibit 5c).

Removing, filling and recompact the poles would not result in a change to the existing contours or drainage pattern of the site. The existing amateur radio station building occupies a level portion of the site. Removal of this building would not result in a change to the existing contours or drainage pattern of the site. For the construction phase, which includes removing the existing improvements of the former amateur radio station, the Project is required to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) and develop a Storm Water Pollution Prevention Plan (SWPPP), which includes development and implementation of Best Management Practices (BMPs). These BMPs would include erosion control and abatement measures, as well as measures to prevent onsite pollutants and waste from being conveyed offsite during the short-term construction phase (refer to the discussion under “a)” above).

During the long-term operational phase of the Project, stormwater runoff from the impervious surfaces at the tower bases and transmission equipment building would be contained within the CMU walls, allowing the water to percolate into the soil within the enclosed areas. Because of this, minimal surface runoff would be permitted to flow from these improved areas. The existing onsite access roads proposed for minimal regrading during the construction phase would be retained during the long-term operational phase. A WQMP would be prepared for the long-term operational phase of the project (refer to the discussion under “a)” above).

As a result, the entire site would retain the existing drainage pattern. Impervious surfaces from the proposed equipment building and radio towers would represent approximately 0.22 percent of the entire site.

Impact Conclusion: Impacts would be less than significant related to altering the site drainage pattern. Impacts would also be less than significant related to substantial erosion and siltation with the preparation and implementation of the mandatory SWPPP and WQMP.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Refer to Impact Question 9b above for discussion related to alteration of drainage patterns on- and offsite and potential impacts to streams and rivers. The Project site has historically been used for a commercial radio station and a private amateur radio station. The site was graded to provide access roads, building pads for the existing building, and pads for the radio towers. The Proposed Project would use the existing access roads and would not require alteration of the site; therefore, the existing site drainage pattern would be preserved.

Impact Conclusion: Impacts would be less than significant related to the altering the existing pattern of the site. Refer to the impact conclusion for Impact Question 9b regarding impact conclusions related to alteration of drainage patterns on- and offsite and potential impacts to streams and rivers.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Stormwater runoff from the impervious surfaces at the tower bases and transmission equipment structure would be contained within the CMU walls, allowing the water to percolate into the soil within the enclosed areas and not be discharged offsite. No onsite stormwater drainage system is planned.

Impact Conclusion: Impacts related exceeding the capacity of existing or planned stormwater drainage systems would be less than significant.

f) Otherwise substantially degrade water quality?

The proposed Project would have a less than significant impacts on water quality. During short-term construction activities, the Project would be required to comply with NPDES and develop a SWPPP, which includes development and implementation of BMPs designed to reduce onsite and offsite erosion, pollution, and flooding during the short-term construction phase (refer to the discussion under “a)” above).

Long-term operational activities would not include elements that will substantially degrade water quality. Project design features such as the open-design of the onsite CMU structures would convey stormwater runoff, allowing the water to percolate into the soil within the enclosures. In addition to this design, the Project would be required to comply prepare a WQMP (refer to the discussion under “a)” above).

Impact Conclusion: Potential impacts to water quality would be less than significant with Project implementation with the implementation of the required SWPPP for the short-term construction phase and WQMP for the long-term operational phase.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The Project site is not located within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, FEMA Flood Insurance Rate Map, or other flood hazard delineation map. Additionally, the site would not be equipped for habitation and does not propose housing.

Impact Conclusion: No impacts to housing within a flood zone would result from Project implementation would occur.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

The Project site is not located within a 100-year flood hazard area; therefore, the proposed structures constructed as part of Project development do not have the potential to redirect flood flows.

Impact Conclusion: No impacts related to 100-year flood hazard impacts would result from Project implementation.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

The proposed Project is located in the Santa Ana Mountains’ ridgeline and is not located near a body of water or a levee or dam. Lake Matthews, Irvine Lake, and the Prado Flood Control Basin are the nearest bodies of water capable of producing a flood from dam or levee failure. However, all of these bodies of water exist at lower elevations than the Project site and, as a result, do not have the potential to flood the site.

Impact Conclusion: No flooding impacts would result from the failure of a dam or levee.

j) Inundation by seiche, tsunami, or mudflow?

The proposed Project is not located near a body of water and the Pacific Ocean is approximately 20 miles southwest at the closest point. Therefore, the Project would not be affected by a tsunami. As

discussed under Impact Question 9i above, the only bodies of water near the Project site capable of producing a seiche are all located at lower elevations. The Soils Report concluded that soils on and adjacent to the site were stable, and not be susceptible to mudflow.

Impact Conclusion: Less than significant impacts related to seiche, tsunami, or mudflow would result from Project implementation.

Section 9 References

Crawford Broadcasting Company. Use Permit Application. February 7, 2011.

Hartsog, Charles H. Soils and Geotechnical Report. March 22, 2011.

10. Land Use and Planning

Would the project:

a) Physically divide an established community?

The proposed Project is located in a rural setting with no established communities or residential uses occurring on or adjacent to the site. The Project site is located outside the boundaries of the Silverado-Modjeska Specific Plan.

Impact Conclusion: Project implementation would not result in impacts related to dividing an established community.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed Project is located in unincorporated portion of the County of Orange. The Project site is zoned by the County General Plan as A-1, General Agricultural. As defined by the County's zoning ordinances, communication transmitting, reception, or relay facilities are principal uses permitted subject to a site development permit. To accommodate the necessary tower height, a use permit subject to planning commission approval is required since the maximum allowable height without use permit is 35 feet high. The Project would not conflict with either the County's General Plan or zoning ordinances.

Impact Conclusion: Impacts related to conflicts with the applicable plans would not occur.

c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?

The Project site is located within the boundaries of the Orange County Central and Coastal NCCP/HCP; however, the site is not located within the Reserve System and is classified as a Non-Reserve Open Space Area with the Cleveland National Forest area. Loss of habitat for covered species and incidental "take" of covered species is not authorized by the Orange County NCCP/HCP and any proposed impacts or "take" will require separate review by CDFC and USFWS; however, no Project development elements are anticipated to result in the loss of native or suitable habitat for any sensitive plant or wildlife species, and no impacts to covered species would occur as documented in the Biological Resources Impact Analysis prepared for the Project by Michael Brandman Associates (Appendix B). Refer to Impact Question 4f above for a discussion related to the Central and Coastal NCCP/HCP.

Impact Conclusion: Project implementation would not result in conflicts with the Central and Coastal NCCP/HCP resulting in less than significant impacts.

Section 10 References

Orange, County of. General Plan. December 9, 2008.

Orange, County of. Zoning Code. June 2005.

11. Mineral Resources

Would the project:

- a) **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

The Project site is not identified by either the California Geological Survey's Mineral Resource and Mineral Hazards Mapping Program or the County of Orange General Plan as containing a known mineral resource of value to the region or residents of the state. No known mineral resource of value occurs on the site.

Impact Conclusion: No impacts to the loss of a known mineral resource would result from Project implementation.

- b) **Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

The Project site is not identified by either the California Geological Survey's Mineral Resource and Mineral Hazards Mapping Program or the County of Orange General Plan as containing a locally important mineral resource recovery site. No known mineral resource of value occurs on the site.

Impact Conclusion: No impacts to the loss of a known locally important mineral resource would result from Project implementation.

Section 11 References

Orange, County of. General Plan. December 9, 2008.

12. Noise

Would the project result in:

- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

The Orange County Noise Ordinance establishes exterior and interior standards for residential properties and special provisions for non-residential land uses. The Project site is located on a private in-holding within the Cleveland National Forest. No sensitive land uses, as defined by the Orange County General Plan Noise Element, are located near the Project site; therefore, no persons would be exposed excessive noise levels.

Construction activities would generate noise from vehicles operating on the Project site, tower erecting, grading of the existing onsite access roads, and installing the prefab building and tower enclosures. However, these activities are temporary and would cease at the completion of the short-term construction phase. Construction activities would be limited to those hours identified in the County of Orange Code of Ordinances, Division 6 - Noise Control, which prohibit activities from occurring after 8:00 p.m. or before 7:00 a.m. Monday through Saturday and prohibit construction activities in Sundays and federal holidays. No sensitive receptors are located in the vicinity of the Project site; therefore, impacts on sensitive receptors from construction impacts would be less than significant. Incorporating the provisions of Division 6 - Noise Control into a recommended mitigation measure would ensure the mandatory regulations are implemented.

Mitigation Measures

- MM NOI-1** Prior to beginning demolition and grading activities, the project applicant and all contractors shall submit to the OC Planning written documentation that the demolition and grading contractors have been notified of and agreed to comply with the provisions of the County of Orange Code of Ordinances, Division 6 - Noise Control prohibiting activities from occurring after 8:00 p.m. or before 7:00 a.m. Monday through Saturday and prohibit construction activities in Sundays and federal holidays.

Impact Conclusion: Impacts related to exposure of persons to noise levels in excess of standards would be less than significant with the implementation of the recommend mitigation measure.

- b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?**

The development of the proposed project would require construction equipment and activities that could generate groundborne vibration and noise during short-term construction phase. Construction noise would be generated by construction equipment during site preparation, grading, and building

construction activities. According to Caltrans, June 2004, the piece of equipment that would cause the greatest amount of vibration during construction would be from a vibratory roller, which typically creates a vibration level of 0.21 inch per second peak particle velocity (PPV) at 25 feet. Because no offsite structures are located within this distance, groundborne impacts would not impact any structures.

No activities from the long-term operational phase of the Project would result in groundborne vibration or noise levels.

Impact Conclusion: Impacts related to exposure of persons to groundborne vibration or noise levels would be less than significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Noise levels associated with the long-term operational phase would be limited to routine maintenance of the equipment on an as-needed basis, which is anticipated to occur several times per week. These activities would be similar in nature to the historic site use and not represent a substantial increase.

Impact Conclusion: No permanent increase in the ambient noise levels would result from Project implementation and less than significant impacts would result.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction activities would generate noise from vehicles operating on the Project site, tower erecting, grading of the existing onsite access roads, and installing the prefab building and tower enclosures. Construction vehicles proposed to be used include a truck-mounted drilling rig for foundation preparation, a trencher for trenching, a small backhoe/loader for minor grading in preparing the tower bases and equipment building base, a truck-mounted A-Frame vehicle for tower assembly, and a hydraulic crane for unloading and placing the equipment building from the transport vehicle. Noise emanating from the construction activities, including from the construction vehicles is intermittent throughout the day and would not occur during the entire day. Construction activities would be limited to those hours identified in the County of Orange Noise Control Ordinance, which prohibit activities from occurring after 8:00 p.m. or before 7:00 a.m. Monday through Saturday and prohibit construction activities in Sundays and federal holidays. No sensitive receptors are located in the vicinity of the Project site; therefore, impacts on sensitive receptors from construction impacts would be less than significant. However, these activities are temporary and would cease at the completion of the short-term construction phase. Noise levels associated with the long-term operational phase would be limited to routine maintenance of the equipment on an as-needed basis, which is anticipated to occur several times per week.

Impact Conclusion: Substantial temporary or periodic ambient noise level increases would be less than significant from Project implementation with mandatory obligations contained in the Orange County Code of Ordinances, Division 6 - Noise Control.

- e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

The Project site is not located within the boundaries of an adopted airport land use plan or two miles of an airport. The nearest airport to the site is Corona Municipal Airport located approximately 5 miles northeast of the Project site

Impact Conclusion: No noise-related impacts from airport operations would impact onsite construction workers during the construction phase or maintenance personnel during the operational phase of the Project.

- f) **For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

The Project site is not located within the vicinity of a private airstrip. No private airports are located within 10 miles of the Project site.

Impact Conclusion: No noise-related impacts from private airport operations would impact onsite construction workers during the construction phase or maintenance personnel during the operational phase of the Project.

Section 12 References

California, State of. Department of Transportation (Caltrans). Transportation and Construction Related Vibration Guidance Manual. June 2004.

Orange County General Plan Noise Element

Orange County Code of Ordinances, Division 6 - Noise Control.

13. Population and Housing

Would the project:

- a) **Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

The proposed Project involves construction of a radio transmission facility and removal of approximately 20 existing towers and one existing, non-residential building. One full-time job would be created in the County as a result of Project development.

Impact Conclusion: Project implementation would not induce substantial growth and no impacts would result.

- b) **Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

No housing units exist on the Project site nor is housing required for Project Implementation.

Impact Conclusion: Project implementation would not displace existing housing and no impacts would result.

- c) **Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

No people reside on or adjacent to the Project site.

Impact Conclusion: Project implementation would not displace existing any people and no impacts would result.

Section 13 References

Crawford Broadcasting Company. Use Permit Application. February 7, 2011.

14. Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?

The proposed Project involves construction of a radio transmission facility and removal of approximately 20 existing towers and one existing, non-residential building. The Project site would not be equipped for habitation and would not introduce activities known to increase risk of wildland fire. Additionally, the Project would comply with all County regulations regarding wildland fire prevention such as brush clearance standards, which would further reduce both the risk of wildland fire and the need for fire protection personnel or facilities. No new governmental facilities or altered fire protection governmental facilities would be required.

Impact Conclusion: Potential impacts would be less than significant related to the provision of fire protection services.

b) Police protection?

The proposed Project involves construction of a radio transmission facility and removal of approximately 20 existing towers and one existing, non-residential building. The Project site would not be equipped for habitation and would not introduce activities known to increase the need for police protection personnel or facilities. Moreover, the periodic presence of maintenance personnel on the site could deter the suspected illegal activities occurring on the site.

Impact Conclusion: Potential impacts would be less than significant related to the provision of police protection services.

c) Schools?

The Project site would not be equipped for habitation and would not include elements that would encourage an increase in population, including the school-aged population. Construction of or expansion of school facilities would not be required as part of Project development.

Impact Conclusion: No impacts would the provision of schools would occur with Project implementation.

d) Parks?

The proposed Project would not include elements that would encourage an increase in population. Project development would not increase the use of current park/recreational facilities or the need for new facilities.

Impact Conclusion: No impacts to parks would occur with Project implementation.

e) Other public facilities?

The proposed Project would not include elements that would encourage an increase in population, and thus, a need for construction of or expansion of public facilities, including hospitals, libraries, museums, or cemeteries.

Impact Conclusion: No impacts to other public facilities would occur with Project implementation

Section 14 References

Crawford Broadcasting Company. Use Permit Application. February 7, 2011.

15. Recreation

- a) **Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

The proposed Project would not introduce people into the Project region and, as such, would not increase the use of local recreational facilities. No officially designated recreation facilities are located on the Project site.

Impact Conclusion: No impacts to parks or recreational facilities would result from Project implementation.

- b) **Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?**

The proposed Project would not introduce people into the Project region and, as such, the construction of or expansion of recreation facilities are not included in the Project, nor would they be required.

Impact Conclusion: No impacts to recreational facilities would result from Project implementation.

Section 15 References

Orange County Master Plan of Regional Riding and Hiking Trails. June 2004.

Orange County Master Plan of Regional Recreational Facilities. June 2004.

16. Transportation/Traffic

Would the project:

- a) **Result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?**

Construction activities would result in a total of approximately 40 vehicle trips during the short-term construction period or less than one trip per day. Construction activities are estimated at 51 days within a 120-day period (40 days of no construction activity). Construction vehicles would include delivery vehicles, and tradesmen vehicles, cement trucks, an A-Frame winch equipped truck, and a flatbed “Low Boy” tractor-trailer.

Long-term operations occurring after the completion of the construction phase would result in approximately 11 vehicle trips per month.

The Project site would be accessed from the intersection of Skyline Drive and West Foothill Parkway in the City of Corona. West Foothill Parkway is classified as a Secondary Highway and is projected to operate at 70 percent of capacity by the Riverside County General Plan, or 30 percent below the design capacity of the roadway. The temporary trips associated with the construction and trips associated with the operational phase would not result in a substantial increase to the existing capacity and traffic load of the street system.

As a result, construction-related traffic impacts in the area would be both intermittent and temporary. Once the operational phase commences, the Project would only require routine maintenance that primarily will entail periodic single-vehicle trips.

Impact Conclusion: Potential impacts related to substantial traffic increases in traffic load and capacity would be less than significant.

- b) **Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

None of the unimproved rural roads in the Project area—Black Star Canyon Road, Skyline Drive, or Leonard Road—are identified by the County of Orange General Plan or Circulation Plan. All construction materials would be brought to the Project site via Skyline Drive. To access Skyline Drive, construction traffic would use West Foothill Parkway, identified as a Secondary Highway by the County of Riverside and City of Corona General Plans. As a Secondary Highway, Level of

Service (LOS) C must be maintained under normal circumstances, although LOS 'D' may be acceptable in Community Development areas, only at intersections of any combination of Secondary Highway, Major Highway, Arterials, Urban Arterials, Expressways, conventional state highways, or freeway ramp intersections.

Black Star Canyon Road could potentially be used for secondary emergency access by Orange County Fire Authority, Orange County Sheriff's Department, and private ambulance, if needed, in which case Santiago Canyon Road would also be used. The County of Orange General Plan's Transportation Element identifies Santiago Canyon Road as a Secondary Arterial designed to accommodate between 10,000 to 20,000 vehicle trips per day at LOS C. Additionally, according to the Transportation Element, intersections within the unincorporated portions of the County must maintain a peak hour LOS D. Construction activities are anticipated to span approximately 120 days, although not continuously. As a result, construction-related traffic impacts in the area would be both intermittent and temporary. Additionally, the majority of traffic impacts related to an increase in vehicle trips would occur on seldom traveled, unimproved rural roads, so impacts to roadways identified in the County of Orange's, County of Riverside's, and City of Corona's Transportation Elements and Circulation Plans would be minimal and LOS standards would be maintained. Once the operational phase commences, the Project would only require routine maintenance that primarily will entail approximately 11 single-vehicle trips per month. Vehicles used would be light pick-up trucks (half-ton or less) and sport utility vehicles (for example, Toyota Tacoma). Skyline Drive is proposed to be used exclusively to access the site as this roadway is also used by the other communications facilities identified in Section 1.5, Environmental Setting of this document.

Impact Conclusion: Potential impacts related to conflicts with circulation system performance would be less than significant with Project implementation.

c) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

The County of Riverside has designated West Foothill Parkway to operate at LOS C. For Santiago Canyon Road, the County of Orange has designated the roadway to operate at LOS C, with adjacent intersections operating at peak hour LOS D although the Santiago Canyon Road to Black Star Canyon Road is not proposed to be used for either construction-related traffic or maintenance-related traffic. Construction activities are anticipated to span approximately 120 days, although not continuously. As a result, construction-related traffic impacts in the area would be both intermittent and temporary. Additionally, the majority of traffic impacts related to an increase in vehicle trips would occur on seldom traveled, unimproved rural roads, so impacts to roadways identified in the County of Orange's, County of Riverside's, and City of Corona's Transportation Elements and Circulation Plans would be minimal and LOS standards would be maintained. Once the operational phase commences, the Project would only require routine maintenance that primarily will entail periodic single-vehicle trips. Refer to Impact Question 18b for a discussion of cumulative impacts.

Impact Conclusion: Potential impacts related to conflicts with circulation system performance would be less than significant.

- d) Conflict with an applicable congestion management program, including, but not limited to level of service standard and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

The Orange County Congestion Management Program and Riverside County Congestion Management Program (CMP) were established to, in part, support regional mobility and air quality objectives by reducing traffic congestion and provide a mechanism for coordinating land use and development decisions. A review of these applicable regional Congestion Management Programs conclude that the proposed Project would not conflict with the programs, including established LOS standards on roadways used for construction and operation traffic. The Skyline Drive and West Foothill Parkway intersection is not designated as a CMP intersection. As previously outlined, both the Orange County and Riverside County Congestion Management Programs identify the impacted roadways—West Foothill Highway and Santiago Canyon Road—as operating at LOS C. This LOS would be maintained throughout Project development and operation.

Impact Conclusion: No impacts would occur related to conflicts with an adopted congestion management program.

- e) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?**

The Project site is not located within an airport land use plan or within two miles of an airport or within 10 miles of a private airport. The nearest airport to the site is Corona Municipal Airport located approximately 5 miles northeast in the County of Riverside. The Project involves construction of four 281-foot radio towers. As mandated by the FAA, the towers will be painted red and white and have red obstruction lighting during the night to prevent potential air navigation hazards.

The FAA conducted an aeronautical hazard study for each of the proposed towers. The FAA concluded that the towers would not exceed obstruction standards or pose a hazard to air navigation (Appendix H). The consultation with and findings of the FAA fulfill the provisions of Section 7-9-129.4 of Orange County Codified Ordinances pertaining to air navigation hazards.

Impact Conclusion: Potential impacts related to changes in air traffic patterns would be less than significant.

f) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Project site will be accessed by Skyline Drive for construction and operational activities. The existing onsite access roads provide sufficient and adequate internal access. No offsite roads or onsite access roads will be redesigned or realigned.

Impact Conclusion: Potential impacts related to design hazards or incompatible uses would be less than significant from Project implementation.

g) Result in inadequate emergency access?

The Project site is accessible by Skyline Drive, which is the proposed access. Black Star Canyon Road could, if needed, provide secondary emergency access. Therefore, either roadway would provide emergency vehicular access.

Impact Conclusion: Potential impacts related to inadequate emergency vehicle access would be less than significant.

h) Result in inadequate parking capacity?

The Project site has adequate space available for parking construction vehicles during the short-term phase and maintenance vehicle parking during the long-term operational phase.

Impact Conclusion: No impacts related to inadequate parking capacity would occur.

i) Conflict with adopted policies, plan or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?

The proposed Project involves construction of four radio towers and associated structures. The Project would not impact plans or programs supporting alternative transportation, including bicycle trails.

Impact Conclusion: No conflicts to alternative transportation systems would occur and no impacts would result.

Section 16 References

Corona, City of. General Plan. March 17, 2004.

Crawford Broadcasting Company. Use Permit Application. February 7, 2011.

Orange County Transit Authority. Orange County Congestion Management Program. December 18, 2009.

Orange, County of. General Plan. December 9, 2008.

Orange, County of. Orange County Codified Ordinances.

Riverside County Transportation Commission. County of Riverside Congestion Management Plan.
March 10, 2010.

Riverside, County of. General Plan. October 7, 2003.

17. Utilities and Service Systems

Would the project:

- a) **Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

The proposed Project would not exceed wastewater treatment requirements of the Santa Ana Regional Water Quality Board. Stormwater runoff from the impervious surfaces at the tower bases and transmission equipment structure would be contained within the CMU walls, allowing the water to percolate into the soil within the enclosed areas. In addition, the Project does not propose a wastewater system.

Impact Conclusion: Less than significant impacts related to exceeding wastewater treatment requirements would result.

- b) **Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

The proposed Project would not require construction or expansion of water or wastewater treatment facilities. The Project would not use water or generate wastewater.

Impact Conclusion: No impacts related to the construction of water or wastewater treatment facilities would result from Project implementation.

- c) **Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

The proposed Project would not require construction or expansion of stormwater drainage facilities. Stormwater runoff from the impervious surfaces at the tower bases and transmission equipment structure would be contained within the CMU walls, allowing the water to percolate into the soil within the enclosed areas.

Impact Conclusion: No impacts related to the construction of storm water drainage facilities would result from Project implementation.

- d) **Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

The proposed Project would not require water supplies during the long-term operational phase for equipment operations. Maintenance personnel would bring domestic water in the maintenance vehicles for personal use in the form of water bottles or water jugs. Similarly, any water needed for

temporary construction activities or domestic water for construction personnel would be brought by construction vehicle.

Impact Conclusion: Less than significant impacts related to available water supplies would result from Project implementation.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The proposed Project would not exceed the wastewater treatment provider's capability to serve the Project's projected demand in addition to the provider's existing commitments. Stormwater runoff from the impervious surfaces at the tower bases and transmission equipment structure would be contained within the CMU walls, allowing the water to percolate into the soil within the enclosed areas. The Project would contribute an insignificant increase of wastewater to the provider's overall net treatment totals. Sanitary facilities (i.e., Porta potties) would be provided for onsite construction workers during the short-term construction period in accordance with the provisions of Orange County's Code of Ordinances pertaining to construction site sanitary facilities. One sanitary facility will be provided for every 20 workers.

Impact Conclusion: Impacts related to wastewater capacity would be less than significant.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

The proposed Project would be served by the County of Orange's Olinda Alpha Landfill in the City of Brea, which is permitted to receive 8,000 tons per day of municipal solid waste. In accordance with local, State, and federal regulations, solid waste collected during the construction phase would be self-hauled to this permitted disposal facility with the permitted capacity to accommodate the discarded materials.

Impact Conclusion: Potential impacts to a permitted landfill would be less than significant.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

The proposed Project would comply with the provisions of Orange County's Code of Ordinances pertaining to solid waste storage, removal and disposal. Solid waste generated onsite during the construction phase and long-term operational phase would be required to be stored in containers with a covering. Solid waste would be required to be removed from the site no less than once per week and transported to the Olinda Alpha Landfill (refer to Impact Question 17f above). Solid waste transported to the Olinda Alpha Landfill would be required to be covered.

Impact Conclusion: Compliance with the mandatory provisions of Orange County would also result in compliance with federal and State statutes and regulations pertaining to solid waste. Therefore, No impacts to compliance with adopted solid waste regulations would occur from Project implementation.

Section 17 References

Crawford Broadcasting Company. Use Permit Application. February 7, 2011.

Orange County Code of Ordinances, Division 3 - Sewage and Solid Waste Disposal.

Orange County Code of Ordinances, Division 3 - Construction Site Sanitation Facilities.

18. Mandatory Findings of Significance

- a) **Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

The proposed project will not significantly reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal. The project site is characterized as a disturbed site having been previously graded for access roads for a commercial radio transmitting facility and an amateur radio station. The Biological Resources Impact Analysis prepared for the proposed Project concluded that the site does not contain suitable habitat for sensitive plant or sensitive wildlife species and does not contain CNDDDB-listed sensitive plant communities. Therefore, no valuable habitat or wildlife population exist onsite and Project implementation would not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal.

The Cultural Resource Records search and Site Visit determined that no historical resources exist on the Project site. Therefore, Project implementation would not eliminate important examples of the major periods of California history or prehistory. The Project site has been previously developed and any significant historic or prehistoric artifacts are likely to have been found during previous grading, excavation, and site development activities. However, if any previously unknown or unanticipated archaeological resources are discovered during grading and construction activities, work in the area would cease and deposits would be treated in accordance with federal, State, and local guidelines including those set forth in California Public Resources Code Section 21083.2. In addition, if it is determined that an archaeological site is a historical resource, the provisions of Section 21084.1 of the Public Resources Code and CEQA Guidelines Section 15064.5 would be implemented.

Impact Conclusion: Less than significant impacts related to degradation of the environment related to plant and wildlife species and historical and archaeological resources would result from Project implementation.

- b) **Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

Impacts from the proposed Project are less than cumulatively considerable. The County Staff indicated there are three residential projects located in the City of Anaheim approximately four miles from the Project site near the intersection of SR-91 (Riverside Freeway) and SR-241 (Eastern Transportation Corridor Toll Road). Two of the projects are associated with the proposed Mountain Park development, which allows for the development of an 830-acre, gated residential community with a maximum of 2,500 residential units, public facilities, infrastructure, a fire station, public trails, trail staging area, concession store/interpretive center, school site, and public community park. The Mountain Park plan also provides for dedication of approximately 2,100 acres of open space. The third residential project, approved in 2009, would allow development of a 56 lot residential development adjacent to the Mountain Park development.

The proposed Project identified potentially significant impacts related to Biological Resources, Cultural Resources, Greenhouse Gas Emissions, and Hazards and Hazardous Materials. Recommended mitigation measures were developed for each of the potentially significant impacts, that when implemented, would reduce the potentially significant impacts to less than significant levels. The mitigation measures developed for Biological Resources, Cultural Resources and Hazards and Hazardous Materials are site-specific; therefore, due to the distance between the proposed project and the proposed residential projects, no cumulative impacts would result. In addition, any site-specific potentially significant impacts associated with these three projects would be required to develop mitigation measures. The generation of greenhouse gases were determined to be below the significance level and did not require mitigation. The recommended mitigation measures for greenhouse gasses were related to compliance with the California Air Resources Board’s Climate Change Scoping Plan of December 2008 (CARB Scoping Plan). With the implementation of the recommended mitigation measure impacts associated with compliance with the CARB Scoping Plan. The three residential projects would be similarly required to comply with the provisions of the CARB Scoping Plan; therefore, no cumulative impacts to compliance with the CARB Scoping Plan would result from Project implementation.

The number of vehicle trips associated with the long-term operational phase of the proposed project is extremely low and was determined be less than significant and did not require mitigation; therefore, due to the distance between the proposed project and the proposed residential projects, no cumulative impacts to an established level of service standard would result from Project implementation.

Impact Conclusion: Less than significant cumulative impacts would result from Project implementation.

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

With the implementation of the recommended mitigation measures, the proposed project would not have environmental effects, which either will directly or indirectly cause substantial effects on human beings.

Impact Conclusion: Implementation of the proposed project would have less than significant effects related to substantial adverse effects on human beings.

Section 18 References

Anaheim, City of. Written correspondence. May 4, 2011.

Orange, County of. Written correspondence. May 4, 2011.

SECTION 4: REFERENCES

4.1 - Section References

Section 1 References

Crawford Broadcasting Company. Use Permit Application. February 7, 2011.

Orange, County of. General Plan. December 9, 2008.

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Riverside, County of. General Plan. October 7, 2003.

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Section 2 References

Orange, County of. General Plan. December 9, 2008.

Section 3 References

Michael Brandman Associates. Air Quality and Greenhouse Gas Background Information and Model Output, Oak Flat Radio Tower Project. May 3, 2011.

Section 4 References

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Section 5 References

Michael Brandman Associates. Cultural Resources Letter Report. March 16, 2010.

Rhue, Vanessa R. Paleontological Resources Letter Report. April 7, 2011.

Section 6 References

Hartsog, Charles H. Soils Report. March 22, 2011.

Section 7 References

Michael Brandman Associates. Air Quality and Greenhouse Gas Background Information and Model Output, Oak Flat Radio Tower Project. May 3, 2011.

Section 8 References

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Michael Brandman Associates. Phase I Environmental Site Assessment. May 6, 2011 and Revised May 14, 2011.

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Section 9 References

Crawford Broadcasting Company. Use Permit Application. February 7, 2011.

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Section 10 References

Orange, County of. General Plan. December 9, 2008.

Orange, County of. Zoning Code. June 2005.

Section 11 References

Orange, County of. General Plan. December 9, 2008.

Section 12 References

California, State of. Department of Transportation (Caltrans). Transportation and Construction Related Vibration Guidance Manual. June 2004.

Orange County General Plan Noise Element

Orange County Code of Ordinances, Division 6 - Noise Control.

Section 13 References

Crawford Broadcasting Company. Use Permit Application. February 7, 2011.

Section 14 References

Crawford Broadcasting Company. Use Permit Application. February 7, 2011.

Section 15 References

Orange County Master Plan of Regional Riding and Hiking Trails. June 2004.

Orange County Master Plan of Regional Recreational Facilities. June 2004.

Section 16 References

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Section 17 References

Crawford Broadcasting Company. Use Permit Application. February 7, 2011.

Orange County Code of Ordinances, Division 3 - Sewage and Solid Waste Disposal.

Orange County Code of Ordinances, Division 3 – Construction Site Sanitation Facilities.

Section 18 References

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Orange, County of. Written correspondence. May 4, 2011.

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